

GOLDEN GATE PARK MASTER PLAN

PHASE I REPORT

*Park Issues and
Needs Assessment*



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SAN FRANCISCO RECREATION AND PARK DEPARTMENT

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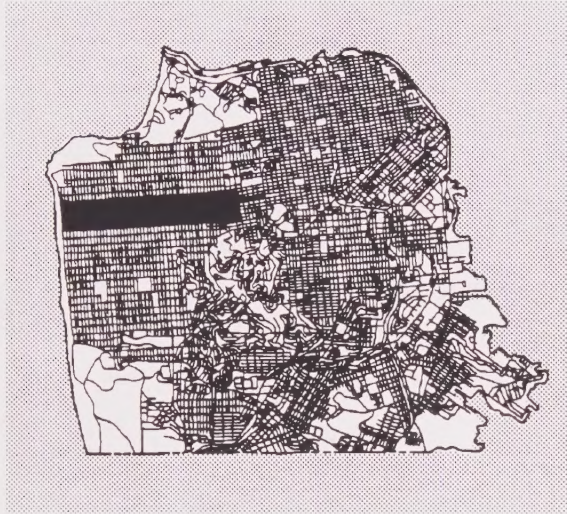
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APRIL 1993

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Introduction

"... no city in the world will have as good reason for taking pride in its park as San Francisco." Frederick Law Olmstead, 1886

During the decade of the 1870's a great park for San Francisco was begun in a vast expanse of land covered primarily with sand dunes. The park was constructed with great amounts of top soil and manure, seeds and seedlings, and heroic vision. It was vision and foresight that created Golden Gate Park from barren land, just as a great city had grown in San Francisco where only a small settlement had existed twenty five years earlier. Other sites in the city were proposed for the park, Hayes Valley, the Presidio (finally to become a park 125 years later), among others. The selection of the sandy Outside Lands for the park was probably more the result of political considerations and a court ruling rather than good planning. The consequences of that decision, however, transformed the western half of San Francisco and created a park of world renown.

The City of San Francisco, and the lives of its citizens has changed dramatically over the last hundred years, yet the purpose and use of Golden Gate Park has remained remarkably unchanged over that time. Today, as one hundred years ago, people are coming to Golden Gate Park to picnic, walk, bicycle, to feed the ducks, to see the bison, and "as a relief and counterpoise to the urban conditions of their ordinary circumstances of life." This is an enduring tribute to the vision and design that created the park. The park is as vital today as it was then, perhaps more so. Today Golden Gate Park is serving San Francisco as its creators had intended: as an oasis of nature and escape from the pressures urban life. Where vision was required to create the park, vision is also needed today to preserve and enhance the park to ensure that it will continue to serve San Francisco in the future.

Golden Gate Park is a priceless resource to San Francisco and the region. It is one of the primary attractions that brings visitors from around the globe. It must be managed as a modern urban park, responding to current needs and desires, while preserving the original design and intent of its creators. The park's managers are constantly making decisions on how to best manage, maintain, preserve and enhance the park. The decisions are based on the existing Objectives and Policies, and judgments as to what is appropriate for the park. The intent of the park's creators is often added to the decision making process and helped shape the Objectives and Policies. The original design intent is subject to interpretation (and sometimes misinterpretation). The following is an excerpt from an 1886 report by William Hammond Hall to the Park Commissioners which explains his design concept for the park in his own words:

"It was designed that the six hundred or more acres of the reservation including and lying west of Strawberry Hill, and its connecting ridge, should be simply treated as a woodland or forest, with all the hills and ridges more or less heavily timbered, and the valleys covered with lower-growing shrubs or field grasses; that the four hundred or less acres east of the hill and ridge should be treated as a more finished park, with its tree plantations in smaller masses or groups, principally on the higher grounds, and its several notable valleys occupied by such special features as a picnic ground; a garden - including a conservatory and semi-tropical exhibit; a children's quarter - including a dairy-house and play grounds; a recreation ground for sports of older people; a lawn, with lake and water terrace; a manor house and grounds, with concourses for carriages

and pedestrians; and an open air concert auditorium; and finally, that the avenue of approach - for its three-fourths of a mile from Baker to Stanyan Street - should afford a means of getting to the park against the direction of the wind, without fully encountering its driving force."

As for the theory and purpose of parks in the nineteenth century, Frederick Law Olmstead, in the same 1886 report to the Park Commissioners wrote the following of Golden Gate Park's landscape:

"The more important is that of obtaining the apparently natural outlines and growths constituting a park fit for occupation by a city's crowds, and suitable for the distinctly rural recreation of people, as a relief and counterpoise to the urban conditions of their ordinary circumstances of life."

The park is facing several challenges in the coming years. One challenge is that almost all of the park's trees were planted in a relatively short span of about twenty years. The lack of continual tree planting has resulted in an even aged forest that is approaching or beyond the lifespan of the trees. Like the trees, much of the park's infrastructure is in poor condition due to age. The 1992 Golden Gate Park Infrastructure Bond, passed by the voters, will provide funds for capital improvements for the water distribution system, lakes, utilities, and continuing the reforestation program. Increased park usage and demands on facilities is straining the ability to maintain the park adequately. At the same time funds to maintain and staff the park are being reduced due to the City's budget problems. The master plan will address these challenges.

The Master Plan

The Master Plan for Golden Gate Park is intended to provide a framework and guidelines for management of the park. The principle behind the master plan is to manage the park for long term stewardship: accommodating the current park and recreation demands while preserving the historic significance of the park for future generations. Frederick Law Olmstead spoke of the long term management of Golden Gate Park in an 1886 letter to the Park Commissioners:

"... let me counsel you, in general terms, to remember that your park is not for today, but for all time - so long as you have a city. ... You have your present population to satisfy and please. It is an intelligent population, beyond a doubt, and possessed of a high appreciation of good results. But it is to be expected that future generations will be more intelligent and more appreciative."

The original master plan for Golden Gate Park was developed by William Hammond Hall and published in the First Biennial Report to the Park Commissioners in 1872. The park was developed based on that plan, although not all elements were completed. In 1890, John McLaren became park superintendent and for the next half century, guided the park's development in his own vision. During his rein, McLaren held true to the original design intent and protected the park from most, but not all threats. The Midwinter Fair of 1894 transformed the area of the park around what is now the music concourse. At the fair's end, McLaren ensured that much of the land was returned to park use. In the 1930's, the New Deal programs funded many park and recreation projects across the country, and changed portions of Golden Gate Park with the addition of facilities such as the Angler's Lodge, Model Yacht Club, Police Stables, Cross Over Drive, the

Park Presidio Bypass, many of the park's restrooms, and a sewage treatment plant. With government programs providing funds, it was hard to refuse new facilities, and many of these were sited in the relatively undeveloped western portion of the park, contrary to Hall's plan.

In 1979, a new master plan resulted in the adoption of the existing Objectives and Policies. (A status and assessment of the existing Objectives and Policies will be done in Phase II of this master plan.) A forestry management plan was done in 1980 and a transportation management plan was completed in 1985.

This master plan is the product of a process that involved Department of Recreation and Park staff, other City departments, a Task Force composed of representatives from neighborhood and user groups, and the general public. There are four main elements:

1. Issues Identification. Issues and concerns were identified through meetings with park staff, meetings with the Task Force, a public meeting, and with a questionnaire distributed with the master plan newsletter. The purpose of this part of the master plan is to assess the range of ideas, opinions, and visions that people have for the park. From these ideas the master plan will identify where there are common themes, where there is community consensus, and where there are differing opinions that will require a decision-making process.

2. Assessment of Existing Conditions and Needs. All park elements were examined to understand the existing condition of the park. This assessment identified deficiencies and needs in the park, and helped to focus which elements in the park would receive special attention in the recommendations phase of the master plan. The assessment of existing conditions and needs in this paper is, in part, a distillation of more detailed background papers that were completed for this master plan. The following background papers are under separate cover: transportation and circulation; forest landscape and wildlife; geology, groundwater and recycled water; economic issues; historic structures; and park history and bibliography.

3. Assessment and Revision of the Existing Objectives and Policies. The Objectives and Policies provide a framework and guidelines for park management decisions. They were developed through an extensive public process in 1979. Some of the conditions and issues have changed, and some of the policy actions have been completed or are outdated. The Objectives and Policies are being revised through a public process that includes review and suggestions by many groups and interested parties involved in the planning process. The revised Objectives and Policies will be adopted by the Recreation and Park Commission.

4. Recommendations and Action Plans. The final element of the master plan includes specific recommendations and action plans to correct deficiencies identified during the master plan process. These will be both parkwide recommendations and recommendations for selected areas within the park. The recommendations will include design changes, management recommendations, and strategies for funding and implementation. The recommendations will receive environmental review before the master plan is adopted by the Recreation and Park Commission.

As mentioned previously, one of the biggest challenges facing the park is the diminishing budgets to maintain and staff the park. One goal of the master plan will be to raise public awareness of the issues facing Golden Gate Park. There will be a need for broad public support to meet these challenges.

Summary of Findings

Golden Gate Park has an international reputation as one of the best urban parks in the world. It is also beloved by the citizens of San Francisco and the region. Most park visitors see a beautiful and vibrant park. The trees are tall, the meadows are green, the flowers are dramatic, and most of the facilities appear to be well maintained. This first impression can be misleading however. The park has some significant problems that are not easily seen on the surface:

- The forest trees are approaching or beyond their expected lifespans.
- The park infrastructure, particularly the water distribution system, is aging and in need of rebuilding.
- The demands of park use are exceeding the ability to maintain the park.
- The amount of motor vehicle traffic is diminishing the quality of the park experience.
- Some of the historic structures are in poor condition, needing major repairs or seismic upgrading.
- Shrinking revenues to the park from the City budget are raising serious questions of the future of Golden Gate Park and how it will be maintained.

Solutions to some of these problems are in progress, but the biggest problem is the question of funds to maintain and restore the park. In times of fiscal crisis, public funds must continue to flow to essential public services and mandated programs. Golden Gate Park has seen its share of the City's budget being reduced. This is a trend that is not expected to change in the future. On the positive side, there is potential for increasing financial support for the park from alternative means, such as individual and corporate donations, concession fees, volunteerism, and other means.

If this master plan has one primary goal to accomplish, it should be to raise awareness of the park's problems and to create a sense of urgency to improve the financial resources that go to the park. It is hoped that the master plan process will stimulate solutions to the funding problem before the park becomes more degraded.

Summary of Park Issues

Park issues were identified in the first phase of this master plan through a series of meetings with park staff, user groups, the task force and the public; and through a questionnaire in the master plan newsletter. Identification of the park issues, in part, determined which issues are addressed in the second phase of this master plan. The issues were divided into ten categories:

- Traffic, Circulation, and Parking
- Appropriate Land Use
- Landscape Preservation and Reforestation
- Management, Revenues, and Concessions
- Security and Homelessness
- Park Amenities and Visitor Services
- Recreation Activities and Impacts
- Wildlife Enhancement and Animal Control
- Buildings and Structures
- Community Involvement and Process

Traffic, circulation, and parking; and landscape preservation and reforestation were the issues of most importance to the Task Force and general public. Issues of most concern to park staff were appropriate land use; management, revenues, and concessions; security and homelessness; and landscape preservation and reforestation. There were significant comments and concerns in all of the issue categories.

Summary of Existing Conditions and Needs Assessment

Park Landscape

The landscape of Golden Gate Park is a man made, naturalistic landscape that was created in an area composed mostly of sand dunes. Its original design intended that the park landscape be a mix of evergreen wooded hills and ridges, valleys of open meadows, and a scattering of lakes and water features. Although well over one hundred years old, and diluted with many new elements, the park landscape, and its purpose, remain true to its original design.

- The lack of a landscape design plan, and the lack of someone with the responsibility and authority of overseeing the landscape design of the park is resulting in a gradual erosion of the original park design.
- The park's terrain and soil is thin and fragile due to the sandy conditions of the native soil. In some places there is significant erosion and loss of top soil.
- The park's forest trees are reaching or beyond expected lifespans, resulting in many trees falling or dropping limbs. The reforestation program needs to be accelerated.
- The meadow and turf areas are generally in good condition but suffer from overuse in some areas.
- The park's horticultural attractions are generally in good condition, but are labor intensive. Maintaining these may become a problem with continuing staffing cuts.
- Several of the parks lakes and water features are in poor condition and need major rebuilding.

Park Amenities and Visitor Services

- The park has no central visitor information center.
- Park signs are not well organized or designed.
- Regulation signs are not applied consistently, and the lack of enforcement reduces their effectiveness.
- Benches lack a consistent and distinctive design appropriate for the park.
- Restrooms are aging and most do not meet accessibility standards.
- Most drinking fountains do not meet accessibility standards.
- There is minimal night lighting in the park and there is a need for pedestrian scaled lighting in areas used at night to improve safety.
- Picnic areas are in great demand during spring, summer, and fall weekends; with permits reserved months in advance.

Recreation Facilities

- Athletic fields are in great demand, and the frequency of use makes adequate maintenance difficult.
- All play areas will need rebuilding in the next few years to meet new standards established for accessibility and safety (revised Title 24, Disabled Access Regulations; and the Consumer Products Safety Commission Guidelines).
- Many asphalt trails are in poor condition. Unpaved trails have erosion spots and are muddy in wet weather. Off trail use, particularly by mountain bikes is causing serious erosion problems and damaging vegetation.
- Equestrian facilities need major renovation.

Summary of Golden Gate Park Visitation and Economic Benefit

The following numbers were developed from available data to estimate annual visitation to Golden Gate Park. It is estimated that one half of the visits are from San Francisco residents, one quarter from Bay Area residents, and one quarter from people from beyond the Bay Area.

- Known visitation from admission fees and permits amounts to almost 7 million visits per year. Casual use of the park is conservatively estimated at between 2.6 million and 6.1 million. Special events attract at least 2 million more visits.
- Based on an expected-use projection method, it is reasonable to estimate that **annual use is averaging between 11 and 15 million visits.**
- Use of the park can be valued in excess of **\$100 million per year accruing to users of the park.**
- The attraction and retention power of the park for **tourists** creates an **economic impact on San Francisco in excess of half a billion dollars a year.**
- The park's effect on surrounding **real estate values creates premiums conservatively estimated in the range of half a billion to one billion dollars (and property tax revenues of \$5 to \$10 million per year).**
- Compared to other large urban parks in the U.S., Golden Gate Park ranks in the middle in terms of staffing and financial resources.

Park Issues

The ideas that shape issues in Golden Gate Park are formed on the basis of each person's viewpoint and how they experience the park. These ideas and issues are as diverse as the people visiting the park. As the park is owned in common, everyone sees the park as their own and emotions regarding the park are strong. Everyone has their own personal vision of Golden Gate Park. The purpose of this part of the master plan is to assess the range of ideas, opinions, and visions that people have for the park. From these ideas the master plan will identify where there are common themes, where there is community consensus, and where there are differing opinions that will require a decision-making process.

Throughout the history of the park, debates over the park have occurred in countless meetings (Commission, Board of Supervisors, and other forums), in the pages of the newspapers, and on street corners. Many of the issues of one-hundred years ago or fifty years ago are strikingly similar to today's issues. Speeding cars, carriages and bicycles crowding the park drives, proposals for new uses and new buildings, and how best to manage the park's forests are issues that have been repeatedly discussed over the years. There are many different viewpoints that create differing opinions on such basic questions as what the park should look like, what the visitor experience should be, and what are appropriate uses of the park. The Master Plan attempts to present the issues objectively and then provide an overview of the park so that differing opinions can be seen in their relation to all others.

The issues were identified through a series of meetings with park staff, the Task Force, interested organizations, and the public, and through a questionnaire in the Master Plan newsletter. As the comments were compiled, it became apparent which issues were of most concern to people. Traffic and reforestation issues were most often mentioned. Issues identification and analysis in Phase I of the Master Plan will help to focus development of options in Phase II. The following sections identify and briefly discuss major issues, provide historical contexts where applicable, and give some background on existing policies related to the issues. The policies discussed are from the existing Objectives and Policies for Golden Gate Park adopted in 1979 and amended in 1985.

Traffic, Circulation, and Parking

Issues regarding traffic, circulation, and parking were the subjects most often mentioned of all the comments received. Traffic and parking congestion are the most visible and tangible of the complaints that people have about Golden Gate Park. The main issue is the intrusion, primarily by automobiles, on the park environment and its impacts on visitor experience. The traffic impairs one of the park's most basic purposes - as an escape from urban pressures.

Circulation issues have often been debated during the park's history. Speeding carriages resulted in the building of a separate speed-road in 1888 to make other park roads safer. There was a debate in the early part of the century as to whether the newly invented automobile should be allowed on park drives. In 1901, automobiles were granted access after drivers passed a driving test and received a driver's license from the Park Commissioners (before the state issued driver's licenses).

Access and the Park Experience. The central circulation issue in the eastern park relates to the inherent conflict between:

- desire to limit auto traffic in the park to enhance the park experience,
- need for access to the park's attractions, such as the de Young Museum, California Academy of Sciences, Strybing Arboretum and Botanical Garden, and the Conservatory, including mobility impaired people, and
- provision of adequate, conveniently located parking for those that drive to the park.

Addressing and developing consensus on how to best address these conflicts will provide direction for how to deal with other circulation issues facing the park.

Through Traffic. By virtue of its location, Golden Gate Park is a popular through route for non-park traffic, particularly during commute times. The speed of non-park traffic was frequently mentioned. For east-west traffic, Kennedy Drive is extensively used. There are existing policies to minimize through traffic, and some actions have been taken in recent years, although it is clearly still a problem. For north-south traffic, actions to implement the existing policy to grade-separate Cross Over Drive from King Drive have not been implemented, nor has any action been taken to explore a north-south through route in the western park.

Traffic and Parking Congestion. On weekends roads in the eastern park are very congested, diminishing the park experience. Demand for parking close to popular attractions is greater than supply, causing additional congestion as cars search for parking. It is existing park policy to reduce traffic in the park, but additional solutions and actions are needed.

Commuter Parking. On weekdays, certain areas in the eastern end of the park are used by commuters working near the park or out of area commuters parking for access to Muni. At issue is whether this is an appropriate use of the park. It is existing policy to discourage all day parking. Some of the affected areas have a 6:00 a.m. to 9:00 a.m. parking restriction, but this has not been effective in reducing all day parking.

Fee Parking. Fee parking has been mentioned as a way of controlling parking. How it would be implemented is not resolved. Park policy holds that parking meters are not compatible with the park environment. Should there be fees for park users and/or for commuters? If commuter parking is included, this would be in conflict with existing policy to discourage commuter parking in the park. Is fee parking feasible and can it reduce congestion? Can fee parking generate revenues for the park?

Road Closures. Currently the eastern portion of JFK Drive is closed on Sundays and holidays, the music concourse is closed on Sundays, and part of Middle Drive West is closed on Saturdays. Access and nearby parking to the cultural institutions in the east end of the park is more difficult when roads are closed. At issue is whether these closures should be extended to other days and areas, modified, or eliminated. The Museums and the Academy of Sciences rely on access and visitation for financial support. Also in question is whether additional roads should be closed permanently. It is existing park policy to remove roads that are not deemed necessary.

Traffic Safety. The speed of vehicles and conflicts with park visitors is of concern. Nighttime safety, particularly in fall and winter months, is also a concern as there is minimal street lighting and the park is used at night by runners, bicyclists, and people attending evening events.

Bicycle Circulation and Access. Bicycle circulation issues involve providing facilities for different types of riders, access to some paved paths, resolving conflicts between bicyclists and pedestrians, roller skaters and automobiles, and considering various traffic restrictions for

bicycles, automobiles and pedestrians. Existing policy calls for encouraging bicycling in the park for recreation and transportation.

Pedestrian Circulation. Issues relating to pedestrian circulation include consideration of north-south routes through the park, separating pedestrians from other circulation modes, and investigation of improved mapping and signing for pedestrian facilities.

Transit Service. Would better (direct) public transit service to the park reduce automobile use in the park? Transit service needs to be considered in any potential changes to roadway circulation. Shuttle services and their implications also need to be considered. Existing policies encourage the use and improvement of public transit and the creation of an internal park shuttle.

The following is a sampling of comments received on traffic, circulation, and parking:

- Control non-park traffic and parking, reduce volume and speeding.
- Include a strategy to phase out automobile use, promote car-free bike routes.
- Use trams (shuttle vehicles) to alleviate parking congestion in eastern end.
- Remove more roads.
- Reduce traffic and parking congestion (including weekends and events).
- Encourage the use of public transit to the park.
- Develop parking around perimeter of park.
- Install speed bumps at major pedestrian crossings to slow traffic.
- Install swing gates at every park entrance to enable complete closing of park to vehicles at certain times (after 11:00 p.m. for instance, to reduce vandalism, cars driving on grass areas, and dumping of trash).
- Close the park to vehicles and parking on weekends.
- Some areas should have vehicles prohibited more than just Sundays.
- Expand bicycle only periods in east end to Saturdays.
- Open the closed areas to vehicles on Sundays for better access to museums.
- Rebuild Crossover Dr./Park Presidio and Kezar Dr. as sunken roads.
- Underground 19th Ave./Crossover Dr. and rejoin east and west halves of park.
- Discourage north-south traffic except on Crossover Dr./19th Ave.
- Eliminate parking on Stanyan St. to increase its capacity.
- Eliminate daylong commuter parking from St. Mary's and UCSF.
- Encourage park and museum employees to use public transit.
- Close Fell Street entrance during rush hour.
- Have a specific transportation plan for bicycles.
- All park roads should be Class III bike routes.
- Need more secure bicycle parking.

Appropriate Land Uses

The question of what uses are appropriate in Golden Gate Park has long been debated. William Hammond Hall wrote that "*a park...should be an agglomeration of hill and dale, meadow, lawn, wood and coppice presenting a series of sylvan and pastoral views, calculated to banish all thoughts of urban objects...*" Those who interpret this literally oppose any loss of green space in the park. Others believe that the park should be altered to respond to current needs.

More specifically, the issue of appropriate land uses refers to some existing "non-conforming" uses in the park such as the Richmond Sunset Water Pollution Control Plant, the recycling center at

Kezar, and the Park Police Station. These are uses that have no direct park or recreation roles. There are also land use questions over how some park facilities are used. Some people question the appropriateness of special events that draw big crowds and take over large portions of the park, events that fence off some park areas to charge an entry fee, or any commercial use of the park.

The existing Objectives and Policies call for the preservation of park open spaces, and fostering of appropriate use of park resources. Specific policies call for the removal of structures that are not essential for cultural or recreational uses in the park. The San Francisco Charter specifies that no structure be erected or enlarged in Golden Gate Park without the approval of two-thirds of all members of the Board of Supervisors. Special events are also subject to a separate permit policy.

Richmond Sunset Water Pollution Control Plant. This sewage treatment plant will be phased out when the new Oceanside Water Pollution Control Plant becomes operational in 1994. The plant could be dismantled and the land returned to park use. The land is also one of several sites being considered for a new water recycling facility. A new plant would require approval by two-thirds of the Board of Supervisors. Proposition A in 1975, which authorized construction of the Oceanside WPCP, identified the opportunity to remove the Richmond Sunset WPCP and return the land to park use.

Recycling Center. The existing recycling center (for recycling of paper, cans, bottles, etc.) next to Kezar Stadium is run by the Haight Ashbury Neighborhood Council under agreement from the Recreation and Park Department. Although it serves some recycling use from within the park, it is mainly used by the surrounding neighborhood. The issue is whether this facility is appropriate to be located in the park or if it should be elsewhere in the neighborhood. Improvements to the recycling center are identified in the Kezar Corner Master Plan.

Large Events. Some large events draw crowds of up to 250,000 people. These are generally restricted to the polo field area and are currently restricted to four times per year by the park permit policy. These events can disrupt all other park uses, cause extreme traffic congestion, and damage park resources. Some events that used to be held at the music concourse, such as opera in the park, have recently taken place at Sharon Meadow. The issue is whether these large events are appropriate for Golden Gate Park, and what areas can survive large events without damage.

Fee Events. There has recently been several music and food events, usually at Sharon Meadow, that fence off the area and charge an event entry fee. Other people are denied use of the area, circulation is disrupted and the events can damage the meadow and other park resources. Vehicles and structures can damage meadows and irrigation components. The issue is whether fee events are appropriate in a public park, and if the park can sustain such intense uses. Fee events must be approved under the park's permit policy.

Maintenance Compounds. There are several Recreation and Park Department maintenance compounds in the park including the nursery/corporation yard complex, the Urban Forestry Center, the composting/wood waste area, and the log storage area. Together these facilities occupy over 17 acres of land in Golden Gate Park. The maintenance facilities support operations city-wide. The Richmond Sunset WPCP and the recycling center occupy another 4.8 acres. All of these facilities provide vital functions to the park and to the city. At issue is whether these areas use their space efficiently, and are there opportunities to relocate any of these to sites outside of Golden Gate Park. Can any of these sites be consolidated?

The following is a sampling of comments received on appropriate land uses:

- Restrict events that draw large crowds of people.
- Reduce commercial use of park.
- Disperse some park use to other parks.

Remove the recycling center.
Remove the sewage treatment plant.
Remove the tourist booth in the Tea Garden bus parking lot.
Phase out big events.
Restore Kezar corner to park uses.

Landscape Preservation and Reforestation

Landscape preservation and reforestation is another topic of great concern, frequently mentioned by the public, by organizations, and by park staff (second only to traffic, circulation, and parking issues). The forests and meadows are the park's most valuable and visible resource. When people think of Golden Gate Park, the trees and green spaces come to mind first. The general concerns are the health of the forest, preservation of the park's open spaces, and landscape design. There is general consensus among all parties for landscape and reforestation concerns and what should be done. The issues and disagreements center around balancing these park needs and all the others with the limited financial resources available.

The existing Objectives and Policies provide clear statements to guide management of the park's forests and landscapes. Objective II reads "*provide for the protection and renewal of the park landscape.*"

Landscape Design. There are some existing guidelines for park landscape design (within "*Reforestation Practices and Procedures for Golden Gate Park*", 1980) but there are concerns that an overall plan is not being followed to preserve the intent of the original park design. Among these concerns is the preservation of the relationship between the forests, the meadows, and the topography. Preservation of the landscape character is also a concern. The western park was intended as naturalistic forests, meadows and lakes, without many flowers or garden-type landscapes. Specific policies call for maintaining the relationship between wooded areas and meadows, and that the park by design intent is basically evergreen.

Reforestation. Most of the park's forest trees were planted in the first few decades of the park. Many of the stands are approaching or beyond the trees' average life span, and until about ten years ago there was no systematic forestry program to plant new trees. The trees serve as vital windbreaks, creating milder microclimates that support the park's diverse vegetation. Existing policy mandates a forest management program to improve the health of the park's trees. There is urgent need today to have sufficient funding to continue planting replacement trees. The need for funds to support a forestry program was also an issue in the 1880's and 1890's when the original forest plantation trees were in serious need of thinning and proper management.

Landscape Maintenance and Care. This issue has two components: that there be adequate staffing and resources to properly maintain the park landscape, and that the landscape features be protected from abuse by activities and uses in the park. The park is basically a man-made naturalistic landscape that is not self-sustaining, requiring sufficient funding for maintenance staffing, tools, and materials. The landscape also needs protection from abuse such as vehicles parking off roadways, events that damage meadows, damage and fires from people camping in the park, and erosion from off-trail recreation.

Sustainable Landscape. Sustainable landscape design creates landscapes that require a minimum of maintenance, water, fertilizers and other resources. It is an important part of

landscape design today and should play a role in the landscape restoration of Golden Gate Park. A more efficient irrigation system and phasing in plant species that do not require much maintenance are some steps that can be done to make the park's landscape more sustainable. It needs to be realized, however, that the park was created over 120 years ago, and was not designed as a sustainable landscape. The degree to which the park landscape is made more sustainable, may have a great change in the way the park looks and may alter the original design intent. Among the changes might be a transition in some meadows from turf to natural grassland that turn brown in summer and fall, and the phasing out of some tree species in favor of other species that may not be as large. These changes may be contrary to existing policies that call for preservation of the existing park landscape. At issue is whether sustainable landscape practices should have a role in park management, and to what degree.

Irrigation System. Parts of the water distribution and irrigation system are very old and need replacement. Much of the irrigation system is not automated, requiring much staff time that could be better spent. The 1992 park bond will provide funds to rebuild the irrigation and water systems as well as other park infrastructure. At issue is what kind of system will be built and what the sources of water will be: well water, City water, and/or reclaimed water.

Use of Reclaimed Water. It is existing city policy to increase the use of reclaimed water, and parks have been identified as potential users. However there are issues and concerns regarding its use in Golden Gate Park. The park currently gets most of its water from wells that tap the rich aquifer beneath the park. That supply is also being considered for other city uses. Reclaimed water, although completely safe for human contact, contains some compounds (primarily salts) that can be damaging to some plants (including many of the park's horticultural displays). Other plants, including the turf areas and most forest trees (except redwood trees), are not adversely affected by reclaimed water. Using reclaimed water may require an expensive dual system. Another possibility is to dilute the reclaimed water with well water to reduce the toxic levels. This was done for many years (1930's to 1970's) with water from an older treatment plant. Other issues regarding the use of reclaimed water are its effects on water quality in the lakes and impacts on plumbing. Reclaimed water contains nutrients that can cause algae blooms in lakes, and cause algae build-ups in pipes.

The following is a sampling of comments received on landscape preservation and reforestation:

- Park reforestation should be a priority.
- Protect old growth and plant new trees.
- The park should have a sustainable landscape requiring minimum water and maintenance.
- Preserve the remaining native plant areas (oak woodlands).
- Produce restoration and management plans for lakes.
- Improve water quality in lakes and ponds.
- Maintain the special flower areas: rhododendrons, fuchsias, rose garden.
- Rebuild the water distribution and irrigation systems.
- Produce a park landscape design master plan.
- Minimize flowers and "garden" landscapes in the western park.
- Preserve the park's "green" spaces (meadows and forest).
- Preserve the park's open spaces.
- Restore the park as a "sylvan retreat."

Management, Revenues, and Concessions

The effectiveness of management procedures and securing adequate budgets for the park have a direct effect on the health of the park. Effective management is critical for utilizing and allocating the limited personnel and supply resources, and for implementing and enforcing the Objectives and Policies. Adequate funding can be subject to uncertain factors such as citywide budget shortfalls, reduction in funds from state and federal sources, and political clout within the city. Although the citizens of San Francisco show great willingness to support Golden Gate Park financially, recent budget shortfalls require prioritizing park needs.

Concessions have always been a subject of much discussion in the park. It has been decided that some services in the park would be better provided by a private concessionaire, rather than directly by the city. The issues regarding concessions usually center around commercialization of the park, and private gain from public resources. Today's procedures for awarding concessions are far better than they were earlier in the park's history when political considerations and graft were key factors. Concessions are viewed as ways of providing certain services without using park funds, which is a growing consideration with reduced funding support. Some concessions can generate revenues for park maintenance and capital projects.

User Fees. With reductions in funding to the park from the City's general fund, opportunities for generating money within the park have been sought. This has meant that fees are charged at some facilities. While generating money for the park, these fees may prevent some poor people from using these facilities. At issue is whether user fees for certain facilities in Golden Gate Park is congruent with the missions of the park and of the Department.

Developing Other Revenue Sources. The diminishing financial resources for the park from city, state, and federal sources require that other revenue sources be found. One potential source of funds is private fund raising, from businesses, from organizations, and from individuals. The Central Park Conservancy in New York has been very successful in supplementing public funds for Central Park with private fund raising. At issue is whether similar funds can be raised for Golden Gate Park, and how those funds can be allocated.

Management Structure and Procedures. There are a number of issues related to how the park management is structured, employee and civil service procedures and requirements, relationships with other city departments and labor unions. At issue is whether there management organization and procedures are efficient, and what impacts they have on Golden Gate Park.

The following is a sampling of comments received on management, revenues, and concessions:

- Reduce commercialization of the park.
- Keep concessions out of the park, there are plenty on the park's perimeter.
- Many businesses make money off the park, some money should go to the park.
- There is the need to increase revenue producing concessions in the park.
- Alternative revenue sources need to be developed.
- Have a non-profit park association run some concession to benefit the park.
- Specific plans are needed for improved maintenance on heavily used areas.
- Increase the financial benefit to the park from large events.
- Litter control and more trash receptacles.
- Rebuild and modernize the park infrastructure.

Security and Homelessness

Although there are problems, the park is perceived by most to be a safe place to visit. However there has been an increase in recent years of misuse of the park by homeless people and an increase of drug abuse and dealing in certain areas. The perception of safety is in jeopardy. Park workers and park users agree that steps must be taken to reverse the trend. The problems in the park are symptoms of larger urban problems and are impossible to solve within the park boundaries alone. Citywide initiatives are needed. The master plan will attempt to identify some problems that can be dealt with, if not solved, within the park.

Homelessness. Regular counts of persons camping illegally in the Golden Gate show that there are between 100 and 350 people living in the park each night. The numbers vary depending on weather and season. This has become a growing problem in recent years. Campsites damage vegetation and several forest fires in the park have been attributed to camp fires. The presence of homeless camps in the park also damages the perception of safety in the park for other park users. The presence of homeless people also interferes with the park gardeners and other workers, and there are fears for the potential of violence. Homeless people must have a place to go, but at issue is whether this can be permitted in Golden Gate Park. The Objectives and Policies and the park code prohibit camping in the park.

Drug Abuse. Some areas in the park, particularly near Alvord Lake and in the Panhandle, have become well known places for drug abuse and dealing. This is as much a citywide issue as a park issue. The safety of park visitors and workers and the potential for violent incidents are the main concerns. Needles left on the ground and in trees have been found by park workers. The Alvord Lake area has recently been designated as a "drug free zone" (mandating stiffer penalties) and is now officially a closed area between 10:00 p.m. and 6:00 a.m. The effectiveness of these measures is not known, but the activities have not been eliminated. Part of the issue is police manpower and how much of presence they can afford to have in the park. The police must prioritize what areas and how often they can patrol, and to which activities they can respond to. There are currently no park personnel with duties to enforce criminal codes other than reporting incidents to police.

Enforcement. Enforcement of both the criminal codes and the park code in Golden Gate Park is a major issue. The park has very minimal resources to enforce the park code. Park patrol officers are in the park at night and on weekends, but most of their duties involve their patrol tasks, leaving little time for enforcement. The San Francisco Police have patrols in the park and respond when called. The police have limited manpower, and generally cannot take the time to enforce infractions of the park code. Police response (or lack of response) to certain criminal activities in the neighborhoods is an issue with community groups.

The following is a sampling of comments received on security and homelessness:

- Eliminate drug dealing at Haight Street/Alvord Lake and other places.
- Control camping and drug abuse.
- End misuse of park land by the homeless.
- Enforcing park camping and drug use prohibitions will increase job safety conditions for park workers.
- Reduce understory vegetation in areas that have illegal activities, enabling better patrolling by police.
- Hire the homeless to clean up the park.
- Eliminate homosexual activity in west end of park.
- Designate the Panhandle playground as a drug free zone.

Have a dog run area next to the Panhandle playground where drug dealers hang out.
Control dumping of trash in park.

Park Amenities and Visitor Services

The issues of park amenities and visitor services are issues of balancing the need for services and conveniences in the park, with the original park design intent of an escape from all things urban. Signs, buildings, food stands and others have their roles, but are intrusions in the park environment. A minimum of these items are needed for visitor safety, comfort, and convenience. These amenities and services need to be evaluated on their cumulative impact on the park.

Signs. There is a need to direct visitors to attractions in the park. There is also a need for certain regulatory and vehicle signs that are mandated by law. At issue is whether the existing and proposed signs in the park are efficient and do not detract from the park experience. Another concern is the design of signs. There are several types (wood, metal, and combinations) that are not used consistently. There are new requests for signs and new roles proposed for signs. There are no adopted guidelines to evaluate and coordinate signs.

Visitor Center. Central to the issue of visitor services is the question of a park visitor center. There is currently no formal visitor information center, although the front desk at McLaren Lodge functions as one on weekdays. There are no park rangers to provide information or interpretive services. Historically, park visitors have been left to their own devices, whether by design or neglect. Is a visitor center appropriate and desirable? Can a visitor center utilize an existing park building or would a new structure be required? A visitor center would provide a centrally located information source, possibly a park exhibit space, educate visitors about proper use of the park, a staging area for interpretive activities, and provide an opportunity for the sale of park-related merchandise (a potential revenue source). The Recreation and Park Commission has identified the Pioneer Log Cabin and the Park Aid Station as being suitable for use as a visitor center. The County Fair Building has also been mentioned for possible use as a visitor orientation center for the arboretum and the park.

Restrooms and Drinking Fountains. There is clearly a need and demand for restrooms and drinking fountains, but these must be planned to minimize their impacts on the park. Many of the existing facilities are in poor condition due to their age or vandalism. How and where these facilities are replaced will need careful consideration. New accessibility laws will require larger restrooms and better access. Restrooms and drinking fountains will be addressed with funds from the 1992 park bond.

Food Services. Food services are part of the amenities that people expect in parks. Historically, food has been served at the Sharon Building and at other locations in Golden Gate Park. Food services are currently provided at fixed concession stands and with mobile carts. The demand exists and they bring some income to the department through concession fees. There are questions over whether these are appropriate within the park or if they should be located in the surrounding neighborhoods, and what type of food should they serve. Also at issue is how food is served. Are carts appropriate? Are restaurants appropriate?

Accessibility. Accessibility laws, including the new Americans with Disabilities Act (ADA), mandate that all public facilities be made accessible. The issues regarding accessibility are how the laws are interpreted, speed of compliance, and degrees of accessibility. Because the laws are new, the guidelines for their application are still being developed. Some accessibility improvements will

be addressed with funds from the 1992 park bond.

The following is a sampling of comments received on park amenities and visitor services:

- Place park maps at all important entries.
- Sponsor interpretive programs, including the cultural history of the park.
- Sign all trails including destinations and distances.
- Have a restaurant at the music concourse.
- The park needs a visitor center to inform and educate visitors.
- Reopen the Beach Chalet.
- Improve visitor amenities such as restrooms, drinking fountains, telephones, etc.
- Improve disabled access.
- Increase free hours at museums for San Francisco residents.
- Have better food concessions, not just hot dogs.

Recreation Activities and Impacts

There has always been demand for active and structured recreation throughout the park's history. Some forms of recreation such as tennis, baseball, and bicycling have been in demand for well over a hundred years. Over the years, demands for new (or newly popular) recreational activities have put increased pressures on the park. Accommodating all new forms of recreation in a park designed over one hundred years ago can cause problems. The demands for recreation need to be balanced with the objectives of preserving the original intent and purpose of the park as a "sylvan and pastoral" retreat. In recent years two examples of new recreation forms that are having an impact on the park are in-line skating and mountain biking. Both of these are the result of technological improvements, and there will undoubtedly be new ones in the future.

Other recreation types have grown in popularity with an increase in impacts on the park. The demand for soccer has increased greatly in recent years. The existing fields are utilized beyond the capacity to maintain them properly. The fields need to be closed regularly for rehabilitation. Increases in park use have created competition for space and resulted in inevitable conflicts such as between bicyclists and skaters. The cumulative impacts of all recreational uses in the park should be evaluated and regulated to protect the park environment and experience. The existing Objectives and Policies includes a policy that reads "*ensure that park recreational activities are compatible with the park environment.*"

Demand for Trails. There is great demand for recreational trails in the park. Some people want designated trails with signs and markers. Currently there are many trails and paths in the park but there are few trail signs, and there are maintenance problems in several areas. An existing park objective calls for the creation and maintenance of a park-wide system of recreational pathways and trails. There is little done to control users of trails to keep them on designated trails and reduce environmental damage by off-trail use. At issue is what level of trail development is appropriate for Golden Gate Park. Are too many signs intrusive? If there are new regulations regarding the use of designated trails, how will these be enforced?

Demand for Athletic Fields. The demand for athletic fields is a citywide issue. Parks are often looked to as open land to locate new fields. There is also the desire to preserve meadows and other parkland as unstructured spaces that host a variety of park uses rather than a single athletic use. It is important to maintain a proper balance between active sports and passive recreation to

serve the broadest community. At issue is what that balance is in Golden Gate Park and other city parks.

Mountain Bikes. The development and popularity of mountain bikes has created a new recreational use in the park that is damaging the park. Mountain bike use has become an issue on public lands around the world. Generally mountain bikes, when they stay on trails, do not have a greater impact on trails than equestrians or hikers. There is however, a large amount of abuse that occurs off trails as some mountain bicyclists seek thrill rides. This has resulted in clearly visible erosion, gullying, and destruction of vegetation in many places in the park. Another issue is conflicts with hikers and equestrians, particularly on narrow trails; and with service vehicles on service roads. There are some proposals to designate certain areas or trails for mountain biking, while others believe that bikes should be restricted to paved surfaces. At issue is whether mountain bike use is appropriate at all in the park, and if it is allowed in certain areas or trails can it be controlled and regulations enforced? Mountain bike use, like many other recreational uses, brings with it additional liability concerns.

In-line Skating. The great increase in the number of skaters has created safety concerns and conflicts with bicyclists, pedestrians, and vehicles that also use the park's paved surfaces. There have also been requests for areas specifically for skating, and requests for additional paved areas. There is a park policy to reduce the amount of paving in the park where possible. Another policy permits some roads that are closed to be retained for recreational uses where a need is identified.

Regulations and Enforcement. Recreational uses should be regulated where necessary. At issue is how park code regulations can be enforced. There is currently very limited park personnel to enforce the code and issue citations. This must be remedied if the regulations are to be effective.

Night Lighting. Currently there are no lighted recreation areas except for Kezar Stadium. The music concourse is lit for evening events in the adjacent facilities. There have been requests for lighting soccer and baseball fields, the Polo Field area, and the tennis courts. If any facilities are lighted, then access roads and parking areas will also need lighting. The park roads currently have minimal lighting. Impacts of lighting on wildlife and adjacent neighborhoods will need to be considered. Runners and bicyclists use the park roads at night, particularly in fall and winter. There are safety concerns due to the minimal lighting of the park roads. Some lighting improvements, particularly in relation to safety conditions, will be addressed with funds from the 1992 park bond.

The following is a sampling of comments received on recreational activities and impacts:

- Provide a better trail system.
- Construct a hiking trail from southwest to northeast starting at 30th Ave.
- Improve bicycle access and recreation.
- More trails should be open to bicycles.
- Mountain bikes are damaging the park.
- Control mountain bike use.
- Playgrounds need updating and renovation.
- More soccer fields are needed.
- Playing fields are needed for special uses such as ultimate frisbee.
- Improve bridle trails and equestrian facilities (including a restroom at Bercut field, more boarding, and indoor arena).
- Repave JFK Dr. for improved skating.
- Better lighting on JFK Dr. and other roads for winter running and bicycling safety.
- Night lighting at the Polo Field for cyclists, runners, and field recreation uses.

Wildlife Enhancement and Animal Control

Although most of the park is man-made, its naturalistic landscape has become an important wildlife habitat within the large urban area of San Francisco. It serves as home to many species and a resting place or seasonal home for other migrating species. Prior to construction of the park, there were rich wildlife habitats in the oak woodlands and in the seasonal wetlands that existed in the area of the Chain of Lakes. The planting of pine, cypress, and eucalyptus forests, and the creation of permanent lakes created new habitats that brought new species of wildlife into the park. As the city grew around it, the park became an ecological island within the city. Many wildlife populations have been declining in recent years for several reasons, including decline and changes in the park's forest and vegetation, poor conditions in some of the lakes, and predation by feral cats. The existing Objectives and Policies state that *"the presence of wildlife in Golden Gate Park is a valuable recreation resource and it should be actively encouraged."*

Feral Cats. There are several colonies of cats living in Golden Gate Park. The cats have been largely responsible for the decline of several wildlife species, including the elimination of quail and rabbits from the park. The cat colonies are the result of cats that have been abandoned in the park. There are people that tend the colonies by regularly feeding and caring for the cats. At issue is whether it is appropriate for people to care for cats living in the park, and if this is not appropriate what should be done to remove the cats. Most of the cats are not adoptable. Some people have proposed to control the colonies by neutering and re-releasing the cats.

Landscape as Habitat. Some areas of the park have historically been maintained in a naturalistic condition to provide wildlife habitat such as the Chain of Lakes area. There have also been some changes in the landscape around the lakes that have altered their habitat value. Removal of underbrush and more garden-like turf and flower areas reduce the habitat values.

Tree Snags. Dead trees and branches provide important habitat and food sources to some species. Dead trees and branches are also a safety hazard for people visiting the park. At issue is whether some snags can be retained in certain areas of the park without incurring a high risk.

Maintenance of Lakes. The maintenance of park lakes for wildlife habitat value has a number of components, including maintenance of water levels, maintaining water quality (in part this is a function of water flow-through), control of erosion and runoff into lakes, and maintenance of vegetation surrounding the lakes. Some lakes in the park, most notably North Lake, have been degraded by maintenance problems.

Dogs. Dogs that are not under direct control of owners can harass wildlife, damage vegetation, and soil meadows and paths. There are several designated dog run areas in the park. The ability to enforce the regulations is an issue.

The following is a sampling of comments received on wildlife and animal control:

- Wildlife populations have been decimated by feral cats.
- Control and eliminate the feral cat population.
- Enhance conditions for wildlife.
- Wildlife observation is an important recreation activity that should be encouraged.
- Improve water quality in park lakes.
- Enhance wildlife habitats at the Chain of Lakes.
- Install interpretive signs to educate park users and protect sensitive areas.
- Install signs in the Panhandle for dog owners to clean up after dogs.

Buildings and Structures

Throughout the park's history construction of buildings, structures, and monuments in the park has been controversial. This remains true today. Some people have seen new structures and facilities as improvements to the park, others see them as intrusions destroying park land. The 1894 Midwinter Fair was the subject of much discussion. When the fair was over, John McLaren made sure that most of the buildings and structures were removed promptly, and even dynamited the electric tower when its owners were slow to remove it. The 1915 Panama-Pacific International Exposition was also planned to be in Golden Gate Park, but protests from park officials and technical problems resulted in its being located in what is now the Marina District.

The Objectives and Policies severely restrict new buildings and expansion of existing buildings. Existing policies also call for the removal of buildings that are not used and not needed for park uses. The San Francisco Charter also requires a two-thirds vote of the Board of Supervisors to approve construction or expansion of any structure in Golden Gate Park.

Building Alterations. Some facilities in the park, including the museums, the Academy of Sciences, and the tennis clubhouse, have proposals for building alterations to improve services. At issue is balancing the needs of these facilities with the park's purpose and policies.

Maintenance and Storage Sheds. The park gardeners and other workers have a need for secure structures to store tools and other items. Existing structures are used where they exist. In other areas, shipping containers have been placed for storage use. The structures are painted green and most are in unobtrusive locations. There have been some comments questioning their use or locations.

Concession Buildings. The condition and quality of all structures in the park reflects on the image of Golden Gate Park. If buildings are seen as eyesores or in poor condition, the image of the park suffers. There have been several comments about the concession stands (trailers) behind the bandstand in the music concourse, and the concession building in the tea garden bus parking lot. At issue is the standards for structures, even if temporary or utilitarian. The existing Objectives and Policies do not specifically discuss design quality, but all changes to structures are subject to an approval process.

The following is a sampling of comments received on buildings and structures:

- Prohibit new buildings in the park.
- Restore historic structures (including Murphy Mill).
- Implement a program for the conservation of historic buildings and monuments.
- Limit expansion of existing facilities, including the museums.
- Remove unnecessary buildings.
- Remove the trailer vendors around museums.
- Find better solution to the park gardeners' containers: better locations or enclosures.

Community Involvement and Process

Golden Gate Park is not an island unto itself. It is surrounded by predominantly residential areas composed of several distinct neighborhoods. San Francisco also has a tradition of neighborhood activism, with many neighborhood groups and associations. There is great interest in what happens within the park, and in the impacts of park events and uses on the surrounding neighborhoods. There is also great love for the park and a desire by many residents to become more involved in the care of the park.

There are many user groups that regularly use the park. As groups and as individuals, many park users express a desire to become more involved in the park. They want to be consulted on proposed changes that impact their recreation, and many are very grateful for the park and want to contribute something back to it. Another group that is potentially the largest, are people that just enjoy the park through passive recreation, and even if they don't visit the park frequently, they're happy it is there.

Neighborhood Impacts. The impacts of regular park use as well as special events are of concern to people living near the park. Most of the concerns involve traffic, parking, and noise issues. The Objectives and Policies have several references for giving consideration to neighborhood impacts on decisions regarding park uses, events, and any planned changes in the park.

Community Involvement. Neighborhood and community groups have a desire to be more involved in decisions regarding park issues. Most of the issues are the subject of commission or committee meetings which are open to the public and include comments from the public. At issue is how best to include community involvement in park issues. Some issues in the park, including this master plan, have special public involvement and outreach components. The amount of public involvement is sometimes subject to limitations of staff time and funds to organize and incorporate public involvement.

Fund Raising. The reductions of public funds going to Golden Gate Park is well known. There is a need to seek funds from other sources. Many parks in this country have private, non-profit associations to benefit the park. Central Park in New York has undergone a dramatic restoration funded largely with private funds. The Friends of Recreation and Parks currently has programs that benefit Golden Gate and other parks in San Francisco. At issue is whether there is the potential to raise significant private funds in San Francisco to benefit Golden Gate Park.

Communication. Most park issues and meetings have some form of public notice and outreach to inform the community of park issues. Inevitably, some actions are taken that people learn of after the fact. At issue is how the department can improve communication with the community within the existing resources.

Volunteerism. In recent years volunteerism has become an important component of park management around the country. Volunteers can be organized to assist park staff with regular tasks as well as provide new services such as interpretive programs. It is one way of improving services when there are reduction of funds going to the parks. From all indications there is great potential in San Francisco for increasing the use of volunteers in the park. Golden Gate National Recreation Area and East Bay Regional Parks have successful ongoing volunteer programs that include regular on-going programs as well as special events. In Golden Gate Park, volunteers attend tree plantings, cleanup days, and regular litter collections. The Friends of Recreation and Parks have organized "You Gotta Have Park" days that include a variety of volunteer activities.

Labor Issues. The use of volunteers raises some concerns among park employees regarding its impact on their own job security. Generally volunteers do not do regular tasks done by park staff. Volunteers are used to supplement park employees by taking on special projects such as area clean-ups or restoration work that cannot be done by park staff; or to bring new programs to the park such as interpretive programs.

The following is a sampling of comments received on community involvement and process:

- Improve the relationship between the park and adjacent neighborhoods.
- Improve communication between park user groups and Recreation and Park Department.
- Increase community involvement in the park, including to help maintain the park.
- Increase volunteer opportunities in the park.
- Explore the potential of private fundraising for Golden Gate Park.

Existing Conditions and Needs Assessment

Park Landscape

The landscape of Golden Gate Park is its most prominent feature, and is what attracts people to the park. The park landscape is the sum of many components: terrain, forests, meadows, horticultural displays, lakes, athletic fields, and climate. The buildings, structures and roads are also components of the landscape in its larger context.

The landscape of Golden Gate Park has its origins in nineteenth century "picturesque" landscape design. The purpose of the picturesque landscape was to provide a setting for relaxation and escape from the harsh urban environment. Wilderness was seen as the ideal landscape, but the rural or pastoral landscape was more appropriate for re-creating in parks and for supporting the park activities. Although the landscapes appeared natural, they were in fact highly contrived, and great effort was taken to shape the land and arrange elements to maximum advantage.

Golden Gate Park is a remarkable achievement, given that the vision of this pastoral landscape was to be created out of sand dunes and the harsh coastal environment. Although it appears very natural, the park landscape is almost completely man made and requires much different management and maintenance than a truly natural landscape. All trees were planted except for oak trees in the north east portion. All of the lakes are man made, although the Chain of Lakes area was likely seasonal ponds. The meadows were created in low valleys and sheltered by trees to create warmer microclimates. The general terrain was not altered drastically, but the impression of hill and dale was exaggerated by planting tall trees on the ridges and hills and leaving the low areas as meadows. This technique was very successful in creating the park's rolling terrain with a minimum of grading.

How we view the landscape today is different from how people viewed it in the past. One hundred years ago people viewed the park and its landscape as a sublime experience, like walking through a landscape painting. There was plenty of undeveloped land, but people came to the park to partake in its fine creation. William Hammond Hall expressed this concept of park experience when he wrote the following in 1873:

"A park . . . should be an agglomeration of hill and dale, meadow, lawn, wood and coppice presenting a series of sylvan and pastoral views, calculated to banish all thoughts of urban objects, and lead the imagination to picture space beyond as a continued succession of rural scenes and incidents."

Today the park is still serving, perhaps more so, its function as a foil to the surrounding urban environment, but our view of the landscape has changed. The landscape is now mature and parts of it are hard to distinguish between naturalistic and truly natural. The distinction is important in planning for its future. Today the concept of open space shapes how we view the park. As the cities expand and consume all undeveloped land, we view parks as those last open spaces where

we can experience the land. Rising land values meant that land for recreational uses was at a premium, so new and popular recreation facilities were located in the remaining park lands. The distinction between the park, with its inherent uses; and recreation facilities, with their activities is one that has become blurred in recent decades. This distinction is an important consideration in preserving the park landscape.

Landscape Design

The overall landscape design of the park has evolved over the years. Its basis was the original plan by William Hammond Hall. John McLaren provided strong leadership in landscape design during his rein. In recent years there has been a lack of oversight in the area of landscape design. There is no one person who's chief responsibility is to oversee the landscape design of the park. There are existing policies to guide landscape design, but the lack of landscape design oversight is resulting in subtle and gradual changes in parts of the park that are contrary to the existing policies. Planting of flowers is being done in some areas of the western park that are supposed to be primarily evergreen and more natural according to the original design intent. The planting of deciduous trees, and the planting of trees in meadows and lawns is discouraged in existing policies but is occurring around the park.

Existing Conditions:

- Some planting and maintenance procedures are being done contrary to existing policies.
- There is a lack of responsibility, authority, and expertise to oversee the park's landscape design.

Needs Assessment:

- Planting and maintenance procedures need to be reviewed for compliance with policy
- Existing policies need be adhered to including the policy which calls for a position to be created to coordinate and guide landscape plans and horticultural modifications within the park.
- A more definitive landscape design plan needs to be developed for the park.

Terrain and Soils

The soil on which the park was built is composed largely of dune sand. It was made arable by importing vast amounts of top soil and by adding soil amendments such as manure. This process continues today with the composting operation. The compost material is used in horticultural areas and new plantings. What is apparent however, is that the soil is very thin in some of the forest areas that have not had new planting. This may have been accelerated in recent years by the drought and minimal growth of herbaceous vegetation under the trees. On some forested slopes there is excessive erosion of the sandy soils due to the lack of herbaceous plants to hold the soil. The sandy subsoil is also exposed on some trails where the trail surface material has been worn away. This is particularly evident on the equestrian trails. Mountain bikes have contributed to severe erosion in some places both on trails and off. The impact of mountain bikes is particularly serious off existing trails where new ruts have formed on the steep slopes that are sought by thrill seeking riders.

Existing Conditions:

- Park soil is generally extremely thin and fragile.
- There is no regular replenishment of soil except in newly planted areas.
- The sandy subsoil is not a good surface for trails.
- Mountain bike use has contributed to serious erosion problems.

Needs Assessment:

- Forest areas need soil replenishment.
- Crushed rock bases are needed in key areas on designated trails.
- Off trail use within forested areas needs to be minimized.
- Mountain bike and equestrian use needs be controlled and restricted to designated trails, and regulations need to be enforced.

Forest Areas

The park's forest landscape is in a mature state and threatened with significant change, with the even-aged trees reaching the end of their lifespans. The current reforestation program was begun in 1980. Reforestation plots are scattered around the western half of the park. As the western forest protects the entire park from the harsh ocean winds, priority was given to reforestation in the western park. Trees, particularly in the eastern part of the park, are dying and dropping limbs at an increasing rate. It is likely that the landscape in some parts of the park will be changed by the loss of forest trees. Throughout the park there are significant tree hazards, with their liability implications. The forestry program removes as many potential hazard trees and limbs as possible. The systematic planting of new trees has not been accomplished in the eastern half of the park. (For a more detailed discussion of forestry issues, refer to the Forestry and Wildlife section of the master plan.)

Existing Conditions:

- Park trees are reaching or beyond expected lifespans.
- The reforestation program is progressing, primarily in the western park.
- There are significant hazards from falling trees and limbs.
- The forestry program is attempting to remove tree hazards.

Needs Assessment:

- Reforestation program needs to be increased throughout the entire park.
- An improved irrigation system is needed to service the reforestation sites.
- Resources to remove hazard trees and limbs need to be increased.
- The reforestation program should incorporate the overall landscape design goals.

Meadows and Turf Areas

The park's open spaces are composed primarily of its meadows and turf areas. These are important elements of the landscape both visually, as the primary characteristic of pastoral landscapes; and functionally, as they support many of the park activities. The meadows are home to large events, sport activities, picnics, and other uses. They are generally tough and able to handle these activities, but there are limits and they do require considerable maintenance, especially when under heavy use. With the addition of ample water, the climate and soils are ideal for meadows. There have been questions over the use of Sharon Meadow for several large events, some of which were previously held in the Music Concourse. Vehicles have damaged some of the turf areas adjacent to roads (curbs have been installed in some areas). In some areas trees are being planted in turf areas, reducing the size of meadows, contrary to existing policy to discourage the practice.

Existing Conditions:

- Meadows and turf areas are in fair condition.
- Some areas suffer from overuse or too many large events.
- There is some damage to turf areas from vehicles.

- The meadows require large amounts of water and the irrigation system is very labor intensive (several meadow areas now have automatic systems).
- Some meadows have drainage problems in low areas, particularly Marx Meadow and Peacock Meadow.

Needs Assessment:

- The use of meadows for large events needs to be evaluated in relation to the ability to maintain the meadows.
- Better controls are needed prevent damage of meadows and turf areas by vehicles.
- Planting of trees in meadows needs to be coordinated with an overall landscape design plan for the park.
- Additional automatic irrigation systems are needed for turf areas to reduce maintenance and use water more efficiently.

Horticultural Attractions

Some of the park's primary attractions are the horticultural attractions such as Conservatory Valley, the rhododendron dell, the rose garden, the tulip garden, the tree ferns, the Shakespeare Garden, and several other displays. Foremost of the park's horticultural attractions is the Strybing Arboretum and Botanical Gardens, which contains significant botanical collections from around the world. These areas require and receive intensive maintenance and resources. They are impressive and give special character to Golden Gate Park. The horticultural displays are generally in good condition, except for the fuchsia dell which has been decimated by an infestation. In addition to the major displays there are many flower beds scattered throughout the park. The appropriateness of some of the flower beds in the western park has been questioned, given the policy for a predominantly evergreen landscape in the western park.

Existing Conditions:

- The horticultural displays are generally in good condition, except for the fuchsia dell which has been decimated by an infestation.
- Irrigation systems vary in quality, some areas have inadequate pressure.
- The horticultural displays require large amounts of water and their maintenance is labor intensive.
- In Strybing Arboretum pathways, and some wood structures and fences are in poor condition.
- Wind screen trees along Lincoln Way that protect Strybing Arboretum are in poor condition.

Needs Assessment:

- Additional staff is the greatest need to maintain the horticultural attractions, particularly at Strybing Arboretum.
- The irrigation systems need upgrading in some areas, with separate systems to water turf and flowers or shrubs separately.
- Strybing Arboretum needs reconstruction of paths to permit better access by maintenance vehicles, larger nursery area, and upgraded irrigation systems including more automatic irrigation, more quick couplers, and specialized irrigation (i.e. drip) in some areas.
- Strybing Arboretum needs restoration of the wind screen trees along Lincoln Way to protect the arboretums collections.
- The distribution of labor resources between horticultural displays and the rest of the park landscape needs to be evaluated.
- The relationship of horticultural displays to an overall landscape design plan for the park needs to be evaluated.

Lakes and Water Features

The lakes in Golden Gate Park are among the scenic highlights of the park landscape. Elk Glen Lake also functions as a reservoir for the water distribution system. The lakes were constructed between 1882 and 1912 with Alvord Lake being the oldest and Mallard Lake being the newest (expanded from a natural fresh water pond). The lakes have a number of problems, their ability to hold water is chief among them. This is most apparent at North Lake where the northern half of that lake has been dammed off to reduce water loss. Water loss is also a problem at Lloyd Lake and is caused by degradation of the clay liners. Other problems include lake edge stabilization, sediment, choking growth of vegetation, duck weed, and algae. The later problem may be a function of water quality, which is poor in some lakes due to a lack of sufficient water flow-through. There are two major water falls: Huntington Falls at Stow Lake was reconstructed in 1984 and is in good condition; and Rainbow Fall on Prayer Book Hill, which may have some structural problems from undermining of soil underneath the concrete-rock structure. There are several small waterfalls, some of which are abandoned, that feed several of the lakes. A water fall and cascade in the De Laveaga Dell has also been abandoned, as well as a channel connecting Metson Lake and South Lake.

Existing Conditions:

- Integrity of lake liners is diminished.
- Edge erosion and siltation.
- Alvord Lake has poor water quality.
- Chain of Lakes have several problems including maintaining water levels, choking vegetation growth, and siltation.
- Lloyd Lake has had serious leakage problems.
- Elk Glen Lake and Mallard Lake are choked with vegetation and sediment.
- Lily Pond is regularly choked with duckweed and other vegetation.
- Stow Lake has areas with lake edge erosion problems and siltation has made some areas too shallow for boating.
- Stormwater runoff, particularly from roads is draining into lakes with a detrimental impact on water quality (the addition of curbs to many park roads compounds this problem).

Needs Assessment:

- A lake management program needs to be developed to improve lake conditions, maintenance procedures, and water quality.
- Lake management goals need to be clarified: i.e.. managing Chain of Lakes for wildlife habitat.
- New lake edge design needs to be developed to permit natural edge with vegetation, while preserving liner integrity.
- Stormwater runoff needs to be managed parkwide.
- Alvord Lake needs more frequent cleaning.
- Mallard Lake needs cleaning of lake bottom, erosion control on lake edges, and improved water flow to improve water quality.
- Lloyd Lake needs reconstruction of liner.
- Elk Glen Lake needs cleaning of lake bottom and removal of sediment.
- Lily Pond needs improved water flow to improve water quality.
- Stow Lake edge needs reconstruction and silt removed from some areas.

Park Amenities and Visitor Services

The original purpose of Golden Gate Park as a pastoral retreat from the pressures of urban living called for a minimum of man made intrusions. In the early days, a trip to the park was an all day affair. Visitor amenities such as refreshment stands, comfort stations and benches were added to enable people to enjoy the park all day. New amenities were scrutinized by the Park Commissioners and the Superintendent. Their value was weighed against the visual intrusion on the park landscape. Over the years this vigilance against urban improvements lessened, as there were more and more arguments and demands for more amenities. Signs, benches, restrooms, food concessions, and other amenities were added, although not necessarily according to any plan.

Visitor Information

Visitors to Golden Gate Park often come to visit particular facilities that they have heard or read about (approximately 30% of park visitors are from outside of San Francisco). To locate their destinations, they usually rely on a map or ask someone. Park maps are easily purchased in the park and throughout the city. Illustrative maps on concrete pedestals are also located at most of the major pedestrian entrances in the eastern end of the park and at other strategic locations. Within the park, visitors get information on the park from brochures and guide books. There is little information provided by signs or exhibits. The need for a visitor center has been expressed, to provide park information and exhibits and to expand visitor services such as providing interpretive programs. Much of the park's history, resources, and natural features remain unknown to most park users. Central Park in New York has recently rehabilitated two existing historic structures for use as visitor centers, providing information and exhibits about the Central Park; and maps, books, and postcards for sale. The visitor centers have played an important role in reintroducing New Yorkers to their great park and informing them about park issues and the on-going restoration. This kind of visitor contact can be important in rallying community and financial support for parks (The Central Park Conservancy has raised \$25 million for capital projects).

Existing Conditions:

- Park maps on concrete pedestals are located at key entrances and other locations.
- Some of the pedestal maps are vandalized and have not been replaced.
- There is little visitor contact.

Needs Assessment:

- Provide better visitor information.
- Increase visitor contact.
- Provide a place for park exhibits and information.
- Increase interpretive programs.

Signs

Signs were kept to a minimum in the early days of the park. Visitors were not to be burdened with directions and regulations, in keeping with the pastoral setting. With the addition of more and more facilities in different parts of the park directional signs were added. New uses and misuses of the park led to the need for more regulations, and more signs to inform visitors. The automobile brought with it new signs and an entire motor vehicle code to govern its use.

Today there is a great number of signs in the park (a 1984 sign survey in the park identified 542 signs that were visible along park roadways). They were added as needs arose, rather than by any plan. The signs include those mounted on poles, freestanding, and pavement signs and generally fall into the following categories:

Park Regulations: Non-vehicle signs relating to public safety and park protection in regard to bicyclists, skaters, pedestrians, equestrians and other non-vehicle activities. These signs are maintained by Recreation and Park staff. Regulation signs are made of various materials, mounted in various manners (including on tree trunks) or painted on pavement.

Traffic and Parking: Signs relating to all vehicle traffic and parking regulations. As public roads, the use of these signs is governed by the California Vehicle Code and they are installed and maintained by the San Francisco departments of Public Works and Parking and Traffic.

Location and Directional: These are signs that indicate locations, facilities, places, street names, or provide directions to them. They are maintained by Recreation and Park staff. There are three main design types including brown metal signs (standard recreation signs), green wood panels hung from metal brackets on poles, and wood panels between wood posts (used at some facility entrances). The location signs offer opportunities for distinctively designed signs, but the existing designs are not used consistently

In addition to the above categories of existing park signs, another type of sign sometimes found in park settings are interpretive signs that provide information on natural and cultural history, resource protection, or other themes of interest to park users. These signs can be merely informative, or can have the benefit of altering user behavior by educating them about resource or park management problems. There are currently no interpretive signs in Golden Gate Park except at Strybing Arboretum. Whether or not interpretive signs are warranted or appropriate for use elsewhere in the park should be considered in the Master Plan.

There are a few other signs in the park that do not fit in the above categories, such as the equestrian trail signs and the Forty-nine Mile Drive signs. Strybing Arboretum has its own sign system.

Existing Conditions:

- Regulation signs are not applied consistently.
- Materials and sign designs are not consistent.
- Signs are generally not organized together and compete in some areas, reducing their effectiveness and causing visual clutter.
- To be effective, regulation signs need to be backed by enforcement.

Needs Assessment:

- Design and use guidelines are needed for all park signs.
- Standard sign designs that complement the park setting need to be developed.
- Regulatory signs need consistent placement and design.
- Well organized signs at park entrances are needed to communicate park regulations (reducing the need for repetitive signs within the park).

Benches

Benches are scattered throughout Golden Gate Park and are an important element for passive use of the park. Benches create social spaces in the park. The west end of Spreckels Lake, for example, has become a popular meeting place for seniors. With the benches filled, many of the seniors bring their own chairs and tables for dominos and chess games.

There are several types of benches in the park, with concrete or metal frames and wood slats. Most benches are painted green, although some are natural wood. The benches are basic designs, without much character. A memorial bench policy provides guidelines for donated benches with a recognition plaque. A minimum donation of \$3,000 covers purchase and installation of a bench (for an estimated 5-year bench life), routine maintenance and repair, administration of the Memorial Bench Program, and a contribution to a park maintenance endowment fund.

Existing Conditions:

- Benches are generally in good condition, some have broken or missing slats.
- Existing benches lack a distinctive design.

Needs Assessment:

- Areas needing new or additional benches should be identified.
- A standard and distinctive bench design needs to be developed for a bench that complements the park setting, resists abuse, and is cost effective.

Restrooms

The condition of the park's restrooms has a large impact on people's perception of the park's condition and management. There are approximately twenty public restrooms in Golden Gate Park, including those in public buildings such as the museums. There are several other restrooms that have been closed due to vandalism or other reasons. Many of the restrooms are in poor condition, needing major repairs, or do not meet accessibility standards. Depending on their location, some restrooms are abused frequently and are often dirty, others are well maintained and kept clean. (See Golden Gate Park Inventory for list)

Existing Conditions:

- Restroom conditions vary greatly from poor to good, depending on location.
- Only a few meet accessibility standards.

Needs Assessment:

- A comprehensive assessment of all restrooms needs to be conducted to assess architectural, mechanical, structural, and accessibility conditions.
- Most of the restrooms need major repairs or rebuilding.
- Identify the need and locations for new restrooms.

Drinking Fountains

There are approximately 32 existing drinking fountains in the park. Of these, about 30 are in working condition. Most are older designs and do not meet accessibility standards. (See Golden Gate Park Inventory for list)

Existing Conditions:

- Most existing drinking fountains (approx. 30 of 32) are functioning.
- Only a few meet accessibility standards.

Needs Assessment:

- Many drinking fountains need updating with new fixtures to meet accessibility standards.
- Identify the need and locations for new drinking fountains.

Trash Receptacles

There are trash receptacles scattered throughout the park, most being in high activity areas. Despite the number of trash receptacles, litter is a problem in the park. In some high use areas the trash receptacles fill up quickly, resulting in trash being piled around it. Dumping of household trash is a problem in some areas, particularly where there are larger dumpster type receptacles.

Existing Conditions:

- Litter is a problem in the park.
- Trash receptacles are too few or too small in some high use areas.
- Dumping of household trash is a problem in some areas.

Needs Assessment:

- More or larger trash receptacles are needed in some high use areas.
- Trash receptacles need to be emptied more often.
- Special events need more intensive trash control.
- Regulations against the dumping of household trash need to be enforced.

Lighting

There is minimal lighting in the park for night use. Most of the road system has basic streetlights, primarily at intersections. There is a considerable number of bicyclists and runners that use park roads after dark, particularly during fall and winter months. The park lighting is owned and maintained by PG&E, except for lights on Crossover Drive, Park Presidio Bypass, Kezar Drive and along the panhandle which are owned and operated by the San Francisco Bureau of Light and Power. Lighting of the tennis courts has been proposed to allow evening use.

Existing Conditions:

- There is minimal lighting in the park resulting in potential safety hazard for pedestrians, bicyclists, and motorists.
- Much of the electric system supplying power to the lights is old and substandard.

Needs Assessment:

- The lighting of park roadways and key pedestrian walks to increase safety needs to be assessed.
- Park lighting system needs to be cost effective, energy efficient, and be a distinctive design that is appropriate for use in the park.

Picnic Areas

Picnicking was a popular activity when Golden Gate Park first opened as it remains today. There are numerous picnic areas throughout the park. Picnic areas range from designated meadows with no facilities to large areas with tables, barbecues, and restrooms. Speedway Meadow and Lindley Meadow are the largest picnic areas with 18 and 15 tables respectively. There are 19 designated picnic areas that can be reserved for a fee, including seven meadow areas without tables. Fees are currently \$25 for a family picnic (\$50 if over fifty people) and \$125 for a company picnic. Most of the popular picnic sites are reserved months in advance for weekends between March and October.

Existing Conditions:

- There are approximately 64 picnic tables in 12 reservable areas around the park.
- 27 tables have barbecues.
- Most are in good condition.
- There are seven other meadow sites that can be reserved for picnics.

Needs Assessment:

- There is great demand for picnic sites on spring, summer and fall weekends, additional tables and picnic areas needs to be considered.

Recreation Facilities

Through the years many of the major recreation activities in the park have remained the same. One hundred years ago people were coming to Golden Gate Park for relaxation, walking, bicycling, picnicking, boating, enjoying the horticultural displays and concerts, and playing baseball, tennis and other sports. Over the years new activities and facilities were added such as horseshoes, playgrounds, lawn bowling greens, model yacht club, soccer fields, fly casting pools, and Kezar Stadium. The addition of many facilities has resulted in an increase of the park land dedicated to exclusive uses rather than to flexible, unprogrammed park land available for less structured park activities.

Athletic Fields

There are large athletic fields at Kezar Stadium, Big Rec, the Polo Field, and the Beach Chalet soccer fields. There are other facilities such as the softball diamonds at Sharon Meadow (Little Rec) and Speedway Meadow, the golf course, the archery field, and the bowling greens. These fields are generally well maintained. There are problems with over use of some fields at the Polo Fields and the Beach Chalet Soccer Fields. The demand for these fields is very high and fields are receiving heavy use. Regular maintenance is not always scheduled into field permit schedules. Attempts to close the fields after periods of heavy rain is not always successful, resulting in damage to the turf.

Existing Conditions:

- Fields are generally maintained in good condition.
- Irrigation systems are substandard in some areas and are labor intensive.
- There is some damage to fields when used after rains.

Needs Assessment:

- Solutions are needed for meeting the increasing demand for athletic fields (in Golden Gate Park and citywide).
- Irrigation systems need upgrading in several areas.
- Scheduling of field use needs to be better coordinated with maintenance schedules.
- Better enforcement is needed to enforce field closures.

Play Areas

There are currently five play areas in the park: 46th Avenue/Lincoln Way, Mothers' Meadow (M.L. King Drive/Crossover Drive), 9th Avenue/Fulton Street, the Mary B. Connolly Children's Playground, and at the panhandle at Ashbury Street. Another play area near the Stanyan St. & Fulton St. entrance, fell into disrepair and was removed. The remaining play areas are in relatively good condition except for the play area at 9th Avenue/Fulton Street. They include wood and steel play structures in sand surfaces. The Mary B. Connolly Children's Playground is the most recently renovated play area, with a major new zone that is accessible for all children and parents. There are concerns about the play area at 9th Avenue/Fulton Street due to its general condition, its proximity to a busy street, its secluded location, and overhanging trees and branches.

There are two new laws that will require eventual redesign of the play areas. The first is the Americans with Disabilities Act of 1990 (ADA) which addresses accessibility. California is revising the State Building Code (Title 24, Disabled Access Regulations) to comply with the ADA. Path of travel to and within play areas, and integration of accessible and non-accessible

elements will need to be reviewed. ADA compliance must be met by 1995. The second law that affects play areas is the Consumer Products Safety Commission Guidelines (CPSC) which were adopted as California law in 1992. This law covers safety issues such as distances between equipment (safety zones), separation of age group equipment (preschool versus school age children), height of fall and surfacing, head entrapment (size of openings), and elimination of protrusions. Compliance with the CPSC must be met by the year 2000.

Existing Conditions:

- The existing play area equipment is in relatively good condition, however, there may be accessibility and safety deficiencies due to new laws.

Needs Assessment:

- Play areas will need to be rebuilt to meet the requirements of the Americans with Disabilities Act, Title 24, and the Consumer Product Safety Commission Guidelines.
- The play area at 9th Ave./Fulton Street is in need of a general renovation and safety improvements including the removal of any potentially hazardous tree branches, and a barrier fence between the play area and Fulton Street (the fence was recently approved and will soon be installed).

Trails and Paths

There are numerous paved and unpaved trails and paths throughout the park including several service roads. They are essential for hiking, running, bicycling and horseback riding; activities that are increasing in popularity (a policy on mountain bike use will be developed as a part of this master plan). Paved paths are also a key component of pedestrian circulation and accessibility. The interior trails offer opportunities to escape from traffic and provide access to the most quiet parts of the park. There are designated bridle trails and a bike path. There are numerous unpaved trails, some of which are "volunteer" or "social" trails that were not planned. The sandy soil is erosion prone when vegetation is trampled and removed. Trail users should be encouraged to remain on designated trails.

Existing Conditions:

- Many asphalt paths are in poor condition from age and root damage.
- Unpaved trails have erosion spots and can be muddy in wet weather.
- "Volunteer" or "social" trails are contributing to erosion problems.
- Uncontrolled off-trail mountain bike use has caused significant erosion problems.
- The designated bike path is poorly designed to function as a multiple-use trail.
- There are few trail signs except on the bridle trail and bike path.

Needs Assessment:

- Many asphalt paths need repaving.
- Heavily used unpaved trails need aggregate (crushed rock) bases to be maintained and support service vehicle access.
- "Volunteer" or "social" trails need to be eliminated where not necessary.
- Multiple-use trails need to be designed to minimize user conflicts.
- Trail use and etiquette education and sign programs are needed.

Other Recreation Facilities

There are numerous other recreation facilities in the park. The conditions of these vary considerably. The facilities that are most in demand generally have better maintenance. In some cases there are clubs or concessions that assist with maintenance. Following are brief summaries of their existing conditions and needs.

Archery Field: Targets need repair and new stands.

Golf Course: Golf course is generally in good condition. The irrigation system needs upgrading.

Handball Courts: Walls need patching and painting, roof needs repair.

Tennis Courts: To be kept in good condition, the tennis courts must be resurfaced every 5-10 years. Courts 1-17 were last resurfaced in 1988. Referee stand, benches, bleachers, and fencing need repair. Accessibility is poor. The showers and locker room facilities need renovation.

Lawn Bowling Greens: Asphalt surfaces around greens need repair. Maintaining greens is highly labor intensive.

Equestrian Center and Bercut Equitation Field: Both of these equestrian facilities are in need of major renovation. The equestrian center is in need of general reconstruction to remedy code violations and seismic upgrade. The bleachers and judges stand at the Bercut Equitation Field are in disrepair and need reconstruction.

Horseshoes: Needs general renovation, often vandalized due to secluded location, not accessible.

Petanque Field: Maintained by users.

Fly Casting Pools: Need periodic draining and cleaning.

Dog Training Field: Surface of field is bare soil due to heavy use and lack of irrigation.

Background Report Summaries

The following are summaries from background reports that were completed to provide information about Golden Gate Park for use during the master plan process. The background reports are available under separate cover from the Recreation and Park Department Planning Office.

Overview History Of Golden Gate Park

by Marianne Babal, Historian

In San Francisco's Gold Rush days, the land now Golden Gate Park was marked on maps as part of the "great sand waste," and untrammelled "Outside Lands," located well beyond the reach of the city's masses. By the end of the Civil War, the nascent city of San Francisco emerged as the chief entrepôt of commerce on the Pacific Coast, rich in the silver wealth of the Comstock and eagerly anticipating completion of a transcontinental railroad. The populace of the city, once teeming with transient fortune-seekers and speculators, now settled down to build a world-class metropolis. The city boasted of luxury, arts, and amusements - but lacked one element of all great cities - a great public park to showcase its natural beauty and climate.

Frederick Law Olmstead, traveling in California in 1866, proposed a public park for San Francisco to enhance the health and morality of the citizenry, and attract capital and investment of the business community. Olmstead envisioned a series of parks: a promenade across the city to the bay, parade ground, and pleasure ground in sheltered Hayes Valley. At the same time, the federal government upheld the city's title to the Outside Lands against claims of squatters. During the course of lengthy litigation over the Outside Lands, local politicians, led by Frank McCoppin, and other citizens rallied for establishment of a public park in the western quarter of the city. A supervisorial committee subdivided the Outside Lands and proposed an arrangement whereby squatters could donate a portion of their claims for a public park in return for clear title to the remainder of their lands. The proposal won McCoppin the Mayor's office, and gained the approval of the state legislature. The supervisors, however, debated over the eastern boundary of the park. The majority opinion of supervisors Stanyan, Shrader and Cole prevailed, establishing Stanyan Street as the park's eastern limit, with an avenue extending to Baker Street. Olmstead's plan for a sheltered inland park and promenade was cast aside for economic reasons: the availability of cheap Outside lands and support of speculators who had a direct pecuniary interest in improvements in the western section of the city (Dobkin 1979: 59-68).

On April 4, 1870, the state legislature passed "An Act to provide for the improvement of Public Parks in the City of San Francisco." Soon after, the newly-formed park commission advertised bonds to fund park improvements. Enough bonds were sold to finance a topographical survey of Golden Gate Park and its approach. Surveyor and engineer William Hammond Hall won the contract to survey park land, completed his report on February 15, 1871, and in August that year was appointed as engineer of the park.

Hall and his work crews took on the task of transforming the sandy, sparsely vegetated 1,017 acre park tract between Stanyan Street and the ocean into a pleasure ground which would convey "warmth, repose, and enlivenment" to citizens. Hall started work on the 270 acres in the eastern end of the park, a locale suitable for features such as a picnic ground, gardens, play and recreation area, and the avenue of approach, now known as the Panhandle. He envisioned a woodland forest on the six hundred acres west of Strawberry Hill, but first extensive sand drifts had to be reclaimed with vegetation. Experiments revealed that lupine seed sown with fast-growing barley successfully sheltered delicate lupine strands from harsh winds and shifting dunes. Initial work completed in 1871 included grading, fencing, drainage and irrigation work, and development of a park nursery. The following year, 22,000 hardy and quick growing trees were set out, park roads built, and visitors began to arrive by the thousands (W.H. Hall, in Report of the Park Commissioners, 1872).

Golden Gate Park welcomed pedestrians, ladies and gentlemen in fine carriages, equestrians, and hordes of bicyclists after 1880. Park use reflected the recreational activities of all San Franciscans, and included band concerts, floral displays, picnicking, croquet, tennis, and racing carriages on the speed road. Facilities arose on park land to attract visitors, including a conservatory, erected on North Drive in 1877; an adjacent music stand completed in 1882; and the children's quarters and playground, dedicated in 1888.

The new pleasure ground provided an aesthetic balance to the harsh realities of city life. Weary city residents could relax in a hygienic atmosphere of the park, surrounded by sublime scenery of trees, shrubs, gardens and picturesque lakes. The park also fulfilled a higher purpose of social reform. In the Gilded Age of the 1870s, parks were seen as a tonic of nature which exerted positive influence on the morals of the common citizen and contributed to physical and mental health. The concept of parks as a vehicle for social reform continued into the next century, but park use moved gradually from aesthetic appreciation to utilitarianism.

Political corruption and chicanery tainted city government and vexed park management in the nineteenth century. Park Superintendent Hall resigned his post in 1876, and for the next decade the park languished due to lack of funds. A change in city administration in 1886 heralded the overhaul of the Board of Park Commissioners, and the return of William Hammond Hall's involvement in Golden Gate Park. Hall, then State Engineer, examined the condition of the park's forest and general state of affairs. In 1886, Frederick Law Olmstead commented on the reclamation and progress of work in the park, stating that, while obviously far from its finished state, the park was "an achievement far exceeding all that I have believed possible" (F.L. Olmstead to Board of Park Commissioners, 1886). In 1890, John McLaren became park superintendent and held the post for over half a century. McLaren soon faced the greatest challenge of his career.

In the wake of the widely acclaimed World's Columbian Exposition, held in Chicago in 1893, San Francisco's park commissioners approved deviation from traditional park use and agreed to host the California Midwinter International Exposition on a sixty-acre plot east of newly-constructed Stow Lake. San Francisco Chronicle publisher Michael H. deYoung, who had served as a vice-president of the Chicago exposition, and banker James D. Phelan, former chairman of California's fair exhibit in Chicago, spearheaded the campaign to raise funds for the fair. Promoters hoped a California world's fair would help pull the state from the depths of a nationwide recession and showcase San Francisco's salubrious winter climate. The California Midwinter International Exposition opened on January 27, 1894 amid parades, bands and military salutes (Clary 1979:116). When the fair closed six months later, over two million visitors had passed through the turnstiles, and the fair recorded a modest profit. The 200-acre Midwinter Fair left an enduring legacy on Golden Gate Park. Several exposition displays continued as park attractions, including the Japanese Tea Garden, and the Egyptian-style Fine

Arts Building, which, filled with objects d'art from the fair, became a permanent museum. The fair's Grand Court became the Music Concourse. Other fair structures were demolished, and with considerable effort by Superintendent John McLaren and his crews, the bulk of the fair site returned to its sylvan roots.

At the turn of the century, under a new city charter, the park came under the direct jurisdiction of the city government instead of the state legislature. New additions included a park lodge, music stand donated by Claus Spreckels, a chain of lakes, and windmills. The growing popularity of the horseless carriage fostered new user conflicts and enforcement challenges for the park police squad.

In 1906, the park served as a place of refuge for thousands of displaced citizens in the wake of the earthquake. Refugee tent camps sprang up beside the park lodge, conservatory, and surrounded the Garfield Monument and other familiar landmarks. Barracks camps covered ball fields and straddled the abandoned Speed Road. A number of park structures sustained heavy damage during the temblor: the Sweeney Observatory atop Strawberry Hill twisted grotesquely and was completely destroyed, and the Children's Quarters, art museum, emergency hospital, and Spreckels Temple of Music suffered severe damage (Clary 1979:157-158). By the new year, the park refugee camps closed, and key park structures were repaired. One new structure, Portals of the Past, commemorated the disaster.

The neighborhoods of the Richmond and Sunset surrounding the park resounded with new building as the city's population moved from the devastated area into the spacious Outside Lands. In 1910, voters approved a proposal to move the California Academy of Sciences from its earthquake wrecked downtown quarters into the park. In 1915, San Francisco hosted the Panama-Pacific International Exposition to celebrate the opening of the Panama Canal and the city's recovery from the earthquake. Groundbreaking ceremonies were held October 14, 1911, in the Polo Field in Golden Gate Park. William Hammond Hall and other concerned citizens, reminded of the impact of the MidWinter Fair on park lands, thwarted initial plans to host another grand exposition in the western portion of Golden Gate Park.

Several new facilities were added to the park in the 1920s, including Kezar Stadium and pavilion, Willis Polk's Beach Chalet, the Shakespeare Garden, and an expansion of the Academy of Sciences with the addition of the North American Hall and Steinhart Aquarium.

The 1930s brought an increased acceptance of parks and recreation as a necessity of modern life rather than a moral tonic. Americans experienced an increase in leisure time brought about by shorter work weeks, technological innovation, or the high unemployment rates during the Great Depression. The Depression also fueled New Deal construction of the Angler's Lodge, Model Yacht Club, Police Stables, Cross Over Drive, the Park Presidio Bypass, visitor sanitary facilities, and a water reclamation plant near the Great Highway. During the war years, San Franciscans tended victory gardens in the park along 9th Avenue. After the war, a golf course was added to the park landscape. In 1950 the Recreation Department and Park Department were merged to form a new Recreation and Park Department. A lodge annex building to house administrative operations of the expanding department.

In the tumult of the 1960s, parks emerged as peaceful neutral terrain in troubled urban America. Golden Gate Park became San Francisco's common ground, a gathering place and magnet for the counter-culture. Flower children from Haight-Ashbury communed with nature on "hippie hill" and attended rock concerts and events held in the park and panhandle. Parks became valued as open space; versatile, undeveloped lands which invited the public to experience an expanding variety of athletic and cultural activities. During the decade, a growing awareness of our national

cultural heritage also resulted in historic landmark recognition for pioneer urban parks, and initiatives to rehabilitate historic park buildings and features.

The last two decades have brought renewal to old Golden Gate Park attractions: rededication of the children's playground, restoration of the park carousel, Huntington Falls, renovation of the music concourse, and initiation of park reforestation. Adoption of park objectives and policies in "The Plan for Golden Gate Park" in 1979 led to road closures at Marx Meadow Drive, Overlook Drive, and the Sixth Avenue entrance. Other objectives addressed:

- 1) Golden Gate Park's contribution to the diversity of cultural and recreational activities;
- 2) Protection and renewal of the park landscape;
- 3) Preservation of open space of Golden Gate park;
- 4) Creation and maintenance of a park-wide system of recreational roadways, pathways and trails, and minimization of vehicular traffic; and
- 5) Appropriate use of park recreation resources.

As part of an on-going attempt to achieve adopted park objectives and policies, work on an updated master plan for Golden Gate Park began in 1992. As part of the master plan project, historical archival and documentary information has been compiled in the Historical Element background report.

Traffic, Circulation, and Parking

By DKS Associates

Golden Gate Park is situated in San Francisco bordered by The Great Highway (and the Pacific Ocean) on the west side, the Richmond and Sunset districts on the north and south sides, and the Haight, Panhandle, and University of San Francisco districts on the east side. An urban park, it accommodates both destination oriented as well as through traffic of all modes: private automobile, taxi, bus, bicycle, pedestrian and roller skates.

The park has 15 miles of roadways, numerous pedestrian paths, a bike path and signed bike routes, and bridle trails for equestrians. The park is further opened to non-motorized traffic on weekends, with closure of Middle Drive West on Saturdays and Kennedy Drive east of Transverse Drive on Sundays and seven Monday holidays. There are about 5,000 parking spaces in the park, with the highest demand for parking in the vicinity of the Museums and California Academy of Sciences in the East Park.

The most popular mode of travel to the park is via automobile (61 percent of park visitors), followed by walking (21 percent), public transit (7 percent) and bicycling (6 percent).

Traffic conditions in the East Park are generally characterized by long, slow moving lines of cars searching for parking spaces. This is especially true on King Drive and Middle Drive East. Conditions are most severe on Sundays, when Kennedy Drive is closed, congested on Saturdays, and less severe during the week. However, there is still considerable parking congestion in the vicinity of the East Park attractions on weekdays.

Traffic in the West Park generally operates with little congestion, and parking is more readily available. The exceptions are Chain of Lakes Drive, where north-south through traffic is excessive for the size of the roadway, and King Drive at the Cross Over Drive intersection, especially on Saturdays when Middle Drive West is closed.

Forest Landscape

by Stephen Smith, Forester

Golden Gate Park's most visible aspect--its beautiful forest and trees--is probably its most appreciated. The trees provide beauty, shade, habitat, windbreak and a more favorable climate in all areas of the park and during all seasons. Preservation and renewal of this treasure and its accompanying vegetation and wildlife is crucial to the continuing presence of the park as an oasis of tranquil beauty within the city of San Francisco.

The Golden Gate Park forest is the inheritor of intelligent planning and artful planting by its progenitors more than a century ago. However, the predominant tree varieties have a normal life span of about 100 years, and, if the forest is not renewed, its trees may begin to present safety hazards as they weaken and die. Natural renewal of the forest is not likely in its present state. Nor is Nature's method of disposing dead, defective and overmature trees through fire a feasible option for Golden Gate Park.

The San Francisco Recreation and Park Department, steward of Golden Gate Park, initiated reforestation following the recommendations of the Golden Gate Park Forest Management Plan (1980), which was based on Policy B, Objective II of the 1979 Plan For Golden Gate Park. The goal of the plan will continue to be the preservation of healthy trees, the replacement of dead and dying trees, and the development of a healthy and safe forest.

Restoration of native species is to be accomplished in limited areas as designated in the Significant Natural Resource Areas Management Plan (SNRAMP), now in the draft stage.

Park wildlife is under severe pressure from changing park usage: Snag and understory brush removal limits habitat. Feral cats, fed by sympathetic visitors, prey on native animals.

Existing Plans Implementation

Of the five policies of Objective II of the Objectives and Policies of the 1979 Plan for Golden Gate Park, three have been fully implemented and two have been partially implemented. All eight elements of the 1980 Forest Management Plan have been initiated, although this ongoing program requires continuing attention. These programs are discussed fully in the Forest Landscape and Wildlife background report.

Existing Conditions

Ongoing reforestation efforts, in compliance with the 1979 Plan for Golden Gate Park, follow the recommendations of the Forest Management Plan (1980). An inventory of park vegetation conducted for the purposes of the Forest Management Plan found almost one-fifth of the forest in a dead or dying condition. A new inventory, conducted by Stephen G. Smith and Park staff and compiled by the California Department of Forestry, is expected to be released in April 1993.

Buildings

by Carey & Co. and G.K.O. & Associates

Park buildings were evaluated in November 1992. 17 evaluations were based on general visual surveys, nine on more detailed surveys. Four structures are in poor condition, seven in fair, 14 good and one excellent. The buildings show signs of deferred maintenance, with deteriorated roofing and paint finishes, insect damage, blocked or damaged gutters and downspouts, and deteriorated windows and broken glazing being the most common conditions. Disabled access ranges from good in the newer buildings and in buildings with simple functions, like the Carousel, to poor in the older buildings and specialized structures like Murphy's Mill.

Recommendations and associated cost estimates assume the existing use will continue. They also assume that buildings will be stabilized or rehabilitated in essentially their current configuration, rather than restored to their original configuration and condition. Conceptual cost estimates cover damage repairs, necessary maintenance procedures and building upgrades to minimum compliance with accessibility standards. The total for all the buildings is \$1,557,900. Two buildings were not included in the estimate:

Sewage Treatment Plant - The future of these structures have not been decided, so a cost estimate based on a future use is not possible.

Park Police Stables - Improvements here are funded by the Police department and not within the scope of this report.

Structural assessments evaluated buildings for compliance with current seismic and structural standards. None of the buildings meet current standards, with levels of compliance varying considerably. Older buildings generally require more work than newer buildings, which were built to more stringent standards. The engineers assigned a square foot cost to each standard Seismic Hazard Rating to determine a conceptual cost estimate for upgrading the structure of each building. The total of these estimates is \$3,152,800. Two structures were not included in this estimate:

Music Concourse Bandstand - Structures in this area have been surveyed and repairs begun.

Sweeney Observatory - The Observatory is a ruin. Seismic work is unnecessary.

Most of the buildings surveyed are in fair condition, however five, including the Alvord Lake Bridge, are in poor condition. Typical conditions include staining, graffiti, settling and cracking of statue bases, and corrosion. The information in this evaluation dovetails with previous work completed for the Arts Commission and is presented in the format of that work.

Recommendations and cost estimates assume complete restoration of the monuments and statues. Conceptual cost estimates for each monument and statue were prepared by Bruce Mosias, and total either \$437,100. or \$570,600., depending on which repair option for the Baseball Player is chosen.

Utilities

by Department of Public Works Staff

Storm Water And Sanitary Sewers

The existing sewer lines in Golden Gate Park are very old. The sanitary sewers are tied into the main sewer lines along Lincoln Avenue and Fulton Avenue. The storm sewers which collect water runoff from the streets, generally daylight in low spots and/or into lakes. Many of the existing sewer lines are undersized and/or incorrectly sized so that they cannot accommodate peak flow. In addition, several sewers are apparently taking on ground water because pumps are activated, even when conditions are very dry.

There is an existing drainage problem at De Laveaga Dell, which is being corrected with a new sewer line. There is also a drainage problem adjacent to Cross Over Drive which must be addressed.

The sewer lines and pump station at Kezar Stadium were replaced in 1991 as part of the redesign of the stadium.

Water Consumption In Golden Gate Park

Prepared 9/91 -- Park Planning Office

Irrigation accounts for nearly all water use in Golden Gate Park. Approximately 763 acres (75% of the total area of the Park) are irrigated by a combination of ground water and imported or City water (San Francisco Water Department).

Water required for irrigation fluctuates according to the weather, the climate, and the time of year. Current consumption is not indicative of the total volume required for irrigation because of 1) the effects of the drought, 2) conservation measures, and 3) restrictions placed on the quantity of water used for landscape irrigation.

Seven wells supply irrigation water and maintain artificial lakes (the total area of the lakes is 31 acres). Two of the lakes, Elk Glen and Stow, are used in the irrigation system. Water fed into Elk Glen Lake from the South Windmill or the Elk Glen Well is pumped up to a reservoir at the top of Strawberry Hill. There is a sensor in the reservoir which will trigger the pump. Overflow goes into Stow Lake. The amount of water pumped into the lakes is not measured. They do need, however, 018 mgd based on net evapotranspiration. The lakes are not maintained at capacity. There are leaks and holes in some of them. Maintenance staff must look at the lake levels and fill, if necessary, by opening manual valves. Special attention is paid to recreational lakes: Stow, Spreckels, and the Fly Casting Pool.

Groundwater consumption is recorded based on water year. Total irrigation was 1,519 acre-feet/year (1.36 mgd) from 1976-1983 and 1,700 acre-feet/year (1.52 mgd) in 1988. These figures were developed by USGS. Current estimates, developed by Montgomery Engineers, show that 1.194 mgd are supplied by groundwater for irrigation.

One-third of the Park is irrigated by City water. City water use is recorded based on calendar year, not water year. The City does not track irrigation consumption. In fact, water records (which list meter readings measuring actual consumption) include potable uses in addition to

irrigation. Therefore, estimates are made as to how much of this water is used for irrigation. Current estimates (Montgomery Engineers) show that .559 mgd are supplied by City water.

In a study on possible use of reclaimed water, Montgomery Engineers, Inc. established the following annual flow:

1.194 mgd currently supplied by groundwater
--.559 mgd estimate of City water used
1.753 mgd required

Montgomery Engineers further found that Golden Gate Park needs:

- 2.98 mgd for an average day during peak months
- 40 psi pressure (150 psi is generated at the soccer field)

The lakes need:

- .018 mgd based on net evapotranspiration from lakes
- 100-130 psi (100 psi will fill Strawberry Hill Reservoir if no irrigation systems are in use. 130 psi required when irrigation systems are in use).

Electric Power And Distribution

The power supply for buildings, water distribution and maintenance operations in Golden Gate Park is delivered by approximately twenty different power lines coming in from Fulton Street and Lincoln Avenue. In general, they are Phase I and Phase II systems which were installed in 1915. These systems need constant maintenance and/or repair. Because of their age, it is hard to find parts.

The electric power for street lights in Golden Gate Park is distributed via a direct burial series loop, which was installed in 1917. Because the wires are not encased in a conduit, they pose a potential hazard. In addition, the power distribution is compromised by ground moisture. Finally, there are places where the wires have been cut accidentally. In these locations, overhead wires have been strung on poles.

More than three quarters (75%) of the street lights are owned and maintained by PG&E. These street lights are old incandescent fixtures which are not energy efficient. It is hard to find parts and maintain these obsolete fixtures, which were installed more than 50 years ago.

The remaining 25% of the street lights in Golden Gate Park are owned and maintenance by the San Francisco Bureau of Light and Power. These lights are very efficient high pressure sodium. They were installed in the late 1970's along 19th Avenue and Kezar Drive via a multiple loop system.

Geology

by Geo Resource Consultants

Golden Gate Park (GGP) is located within the Coast Ranges geologic province which is characterized by a northwest trending series of ranges and valleys. The Park is underlain primarily by Holocene eolian dune sands with some localized areas of artificial fill. These surficial deposits are underlain by the Colma Formation. The Colma Formation ranges up to 400 feet thick below the Park and consists of unconsolidated sand and silty sand with scattered clay beds. Exposures of the Franciscan Complex basement rocks crop out in some central and eastern areas of the park. A particularly noteworthy outcrop is Strawberry Hill, which consists of a melange of sandstone, greenstone, chert, and shale of the Franciscan Complex.

GGP is located within a seismically active region. Active faults which have generated moderate to strong earthquakes within the Bay Area include the San Andreas, the Seal Cove - San Gregorio, Hayward, Calaveras, Rogers Creek, Green Valley, Concord and the Greenville faults. A major earthquake on the San Andreas, Seal Cove - San Gregorio, Hayward, or Calaveras faults could potentially cause strong to severe ground shaking at GGP. The strongest earthquake in the Bay Area during historic time was the 1906 earthquake on the San Andreas fault which was estimated to be approximately 8.3 on the Richter scale. Significant damage to various buildings within GGP were reported. The only fault that runs through GGP is the City College fault, which is not considered active by the California Division of Mines and Geology (CDMG).

Groundwater

by Geo Resource Consultants

GGP is underlain by the Westside Groundwater Basin, a basin that is approximately 2 miles wide and 11 miles long. The aquifer materials consist of dune sand, and sands of the Colma Formation. Within GGP, the aquifer ranges from less than 100 feet to approximately 400 feet thick. The basin is deeper in the western portion of the park and thinnest in the area of the Arboretum.

Recharge to the basin is from rainfall, irrigation return-flow, sewer and water pipe leakage, and groundwater inflow from adjacent basins. The USGS has reported that, except for high nitrates in some wells, groundwater is generally of good quality. The most likely source of nitrate is from sewer seepage and irrigation return-flow.

GGP irrigation water consists of approximately two-thirds well water and one-third City supplied water. Well water is pumped from seven operating wells located in GGP. Groundwater pumpage is not metered although the quantity of groundwater used in GGP has been estimated at 1,726 acre-feet (1.54 million gallons/day; mgd) in 1988 (USGS, 1990). The City supplied water in 1988 was 363 acre-feet (0.32 mgd).

Potential increases in groundwater production have been considered for GGP in order to eliminate City water for irrigation use. Groundwater increases have been evaluated in terms of increasing production at existing wells, specifically at the South Mill and Elk Glen wells, and by drilling new wells. An increase in pumping schedule at the South Mill could provide an increase in groundwater of approximately 415 acre-feet/year (0.37 mgd). Production from a new well located at the Buffalo Paddock could provide approximately 604 acre-feet/year (0.54 mgd) and

production from a new well located near the Arboretum could provide approximately 202 acre-feet/year (0.18 mgd).

Irrigation distribution is not accurately represented on existing maps and the San Francisco Department of Public Works is currently updating existing maps. Most of the groundwater pumped is distributed from GGP reservoirs and some artificial lakes although some groundwater is fed directly into the irrigation lines. Irrigation is controlled primarily by visual observation and manual controls. Some portions of the park require irrigation at night, which is supplied by overflow from Stow Lake. Irrigation system operations need to be fully understood prior to designing new or upgraded systems. Increased reservoir capacity may be required if well water were to be substantially increased.

All of the water impoundments at GGP are artificial and are supplied by well water. Many of the lakes are currently leaking substantial amounts of water.

Recycled Water

by Geo Resource Consultants

A Water Recycling Master Plan has recently been prepared by James M. Montgomery Consulting Engineers for the City and County of San Francisco. The Master Plan outlines methods to provide recycled water to potential users, one of which would be GGP for irrigation water. For GGP, recycled water would be produced at the future Oceanside Water Pollution Control Plant (OWPCP). Regulatory requirements state that recycled water use for irrigation in areas of high public exposure (which would be the case at GGP) require tertiary treatment.

An evaluation of the predicted quality of recycled water from the OWPCP suggests that water quality constituents would be within the acceptable or marginal levels for irrigation although distribution by sprinkler irrigation could aggravate the impact of salts on various types of vegetation. Conversations with Park personnel indicate that there is concern regarding impacts to certain types of vegetation from recycled water use. Bench tests using recycled water and recycled water blended with groundwater are being conducted on various vegetation to assess potential impacts prior to modifying the existing system to irrigate with recycled water.

Recycled water could be transported to GGP either through the existing AWSS system or through new piping systems. Storage for recycled water could be maintained at existing reservoirs currently used to store groundwater, and potentially, new reservoir sites. Storage in existing lakes would probably result in excessive eutrophication and could result in clogging of irrigation lines by algae.

Park Visitation and Economic Benefit

by Economics Research Associates

The goal of this part of the master plan is to place Golden Gate Park in the context of the economic considerations which are used daily to make decisions regarding the allocation of public resources. This is not to imply that the only value of the park is that which can be quantified. On the contrary, there are clearly benefits to San Francisco and the regional community in the Bay Area which will remain unquantifiable in this analysis. These social benefits include the health effects of outdoor recreation, the spiritual benefits of parks and open space, the enhancement of air quality from vegetation, the resource value for cultural and environmental education, the psychic value to many of "just knowing the park is there," and the attraction power in business location decisions, to name only a few. Although any economic accounting will be inherently limited in scope, it is useful to demonstrate that even on narrow economic terms, using order-of-magnitude estimates, Golden Gate Park has tremendous value to the San Francisco and the rest of the Bay Area. The economic findings are summarized below.

- Known visitation from admission fees and permits amounts to almost 7 million visits per year. Casual use of the park is conservatively estimated at between 2.6 million and 6.1 million. Special events attract at least 2 million more visits.
- Based on an expected-use projection method, it is reasonable to estimate that **annual use is averaging between 11 and 15 million visits.**
- It is estimated that one half of the visits are from San Francisco residents, one quarter from Bay Area residents, and one quarter from people from beyond the Bay Area.
- Use of the park can be valued in excess of **\$100 million per year accruing to users of the park.**
- The attraction and retention power of the park for **tourists** creates an **economic impact on San Francisco in excess of half a billion dollars a year.**
- The park's effect on surrounding **real estate values creates premiums conservatively estimated in the range of half a billion to one billion dollars (and property tax revenues of \$5 to \$10 million per year).**
- Compared to other large urban parks in the U.S., Golden Gate Park ranks in the middle in terms of staffing and financial resources.

Master Plan Maps

The following is a list of park maps that were prepared during Phase I of the master plan. The maps were compiled mostly from existing information prepared at a scale of 1"=500'.

- Park Features and Places
- Land Use
- Circulation
- Topography
- Forest Canopy
- Understory Vegetation
- Water Distribution System
- Electric and Water Water Systems
- Street Lighting
- Geology (map and cross section)
- Alluvial Thickness and Well Locations
- Sensitivities of Vegetation to Reclaimed Water

Appendices

Comments on Issues

The following is a summary of comments that were received during the issues identification phase. Comments are recorded from comments at meetings and from written comments received.

- **General Comments**

- Keep the park as it is.

- Have a more natural park with less commercialism.

- Dedication of an improvement program to the memory of Alfred Fuhrman.

- **Traffic, Transportation, Parking**

- Control non-park traffic and parking, reduce volume and speeding.

- Include a strategy to phase out automobile use, promote car-free bike routes.

- Use trams (shuttle vehicles) to alleviate parking congestion in eastern end.

- Remove more roads.

- Reduce traffic and parking congestion (including weekends and events).

- Encourage the use of public transit.

- Develop parking around perimeter of park.

- Install speed bumps at major pedestrian crossings to slow traffic.

- Install swing gates at every park entrance to enable complete closing of park to vehicles at certain times (after 11 PM for instance to reduce vandalism, cars driving on grass areas, and dumping of trash).

- Close park roads to vehicles on Saturdays as well as Sundays.

- Open the closed areas to vehicles on Sundays for better access to museums.

- Shift Sunday road closures to western end of park.

- Rebuild Crossover Dr./Park Presidio and Kezar Dr. as sunken roads.

- Underground 19th Ave./Crossover Dr. and rejoin east and west halves of park.

- Discourage north-south traffic except on Crossover Dr./19th Ave.

- Eliminate parking on Stanyan St. to increase its capacity.

- Eliminate daylong commuter parking from St. Mary's and UCSF.

- Sell commuter parking permits to raise park revenue (charging for parking that already occurs).

- Close Fell Street entrance during rush-hour.

- Encourage the use of bicycles to and withing the park, and improve bicycle facilities and road design.

- All park roads should be Class III bike routes.

- More bike routes into GGP.

- Need more secure bicycle parking.

- **Appropriate Land Uses**

- Restrict events that draw large crowds of people.

- Reduce commercial use of park.

- Disperse some park use to other parks.

- Remove the recycling center.

- Remove the sewage treatment plant.

Remove the police station.
Remove the tourist booth in the Tea Garden bus parking lot.
Phase out big events.
Restoring Kezar corner to park uses.
Enforce the ruling against Food Not Bombs.

- **Landscape Preservation and Reforestation**

Reforestation, landscaping and improving species diversity.
Protect old growth and plant new trees.
The park should have a sustainable landscape requiring minimum water and maintenance.
Preserve the remaining native plant areas.
Restoration and management plans for lakes.
Improve water quality in lakes and ponds.
Maintain the special flower areas: rhododendrons, fuchsias, rose garden.
Realistic and efficient reforestation plan.
Encourage the use of native plants.
Preserve and continue development of Strybing Arboretum.
Mapping and modernizing irrigation system.
Coordination of park sections toward compliance of master plan (particularly appropriate plantings).
Preserving the park's "green" spaces (meadows and forest) and the park's "naturalness".
Preserve the park's open spaces.
Restore the park as a "sylvan retreat".
Renew and preserve the western windbreak.
Control the destruction of the landscape around Alvord Lake.
Plant more flowers.

- **Operations/Management/Revenues/Concessions**

Keep concessions out of the park, there are plenty on the park's perimeter.
Rebuild park infrastructure.
Limit commercialization of the park.
Specific plans for improved and programmed maintenance on heavily used areas.
Park needs better maintenance.
Park needs better litter control and more trash receptacles.
Consider non-profit groups to operate some concessions (i.e. Friends of Recreation & Parks, and Strybing Arboretum Society).
Expand the role of non-profit groups to raise private donations for the park.
Improve cooperation between Recreation and Park Department and non-profit support groups.

- **Security/Homelessness**

Eliminate drug dealing at Haight Street/Alvord Lake and other places.
Control camping and drug abuse.
End misuse of park land by the homeless.
Reduce understory vegetation in areas that have illegal activities, enabling better patrolling by police.
Hire the homeless to clean up the park.
Bring the City's homeless service vans into the park.
Eliminate homosexual activity in west end of park.
Designate the Panhandle playground as a drug free zone.
Have a dog run area next to the Panhandle playground where drug dealers hang out.
Control dumping of trash in park.

- **Park Amenities/Visitor Services**

- Place park maps at all important entries.
 - Have a wall and sidewalk around perimeter of the park.
 - Interpretive programs, including the cultural history of the park.
 - Careful signing of all trails including destination and distances.
 - Restaurant at the music concourse.
 - Consider redeveloping part of the County Fair Building as a visitor orientation center for the park and the arboretum.
 - Reopen the Beach Chalet.
 - Improved visitor amenities such as restrooms, drinking fountains, telephones, etc.
 - More functioning restrooms.
 - Open Kezar restrooms.
 - Improve disabled access.
 - Electric outlet for use by Shakespeare in the Park.
 - More free hours at museums for San Francisco residents.
 - Eliminate hot dog stands, encourage healthy, vegetarian food concessions.
 - Have better food concessions, not just hot dogs.

- **Recreation Activities and Impacts**

- Provide better trail system.
 - Construct a hiking trail from SW to NE starting at 30th Ave.
 - Improve bicycle access and recreation.
 - More trails open to bicycles.
 - Control mountain bike use.
 - Playgrounds need updating and renovation.
 - Replace play structure at Fulton/10th Ave. play area.
 - More recreation facilities and activities for children.
 - More playing fields for special uses such as ultimate frisbee.
 - Improve bridle trails and equestrian facilities (including a restroom at Bercut field, more boarding, and indoor arena).
 - Repave JFK Dr. for improved skating.
 - Better lighting on JFK Dr. for winter running safety.
 - Night lighting at the Polo Field for cyclists, runners, and field recreation safety.

- **Wildlife Enhancement/Animal Control**

- Control and eliminate the feral cat population.
 - Reduce the feral cat population humanely.
 - Enhance conditions for wildlife.
 - Enhance wildlife habitats at the Chain of Lakes.
 - Interpretive signs to educate park users and protect sensitive areas.
 - Signs in the Panhandle for dog owners to clean up after dogs.

- **Buildings and Structures**

- No more buildings.
 - Restoration of historic structures (including Murphy Mill).
 - Inventory of historic architecture and monuments and a program for their conservation.
 - Limit expansion of existing buildings.
 - Remove the trailer vendors around museums.
 - Preserve existing monuments, limit new ones.

- **Community Process**

- Improve the relationship between the park and adjacent neighborhoods.
 - Improve communication between park user groups and Recreation and Park Department.
 - Increase community involvement in the park, including to help maintain the park.

List of Contacts

The following is a list of agencies and organizations that have submitted comments or been interviewed during Phase I of the Master Plan Process.

Neighborhood and Citizen Groups:

Buena Vista Neighborhood Association
California Native Plant Society
Chinatown TRIP
Coalition of Haight Ashbury Community
Coalition for San Francisco Neighborhoods
Cole Valley Improvement Association
District One Political Action
Edgewood Neighborhood Association
Eureka Valley Trails and Art Network
Forest Hill Association
Golden Gate Audubon Society
Haight Ashbury Improvement Association
Haight Ashbury Neighborhood Council
Inner Sunset Action Committee
Inner Sunset Merchants Association
Inner Sunset Neighborhood Association
Inner Sunset Park Neighbors
Kezar Citizens Advisory Committee
Kezar-Poly Neighborhood Association
Lincoln Park Neighborhood Association
Mt. Olympus Neighborhood Association
New Mission Terrace Improvement Association
Ocean Beach Homeowners Association
Outer Richmond Neighborhood Association
ORAA
Planning Association for the Richmond
Recreation Center for the Handicapped, Inc.
Richmond Democratic Club
Richmond Sunset Green Party
San Francisco Bicycle Coalition
San Francisco Bicycle Messenger's Association
San Francisco Heritage
San Francisco Joint Open Space Committee
San Francisco League of Urban Gardeners
San Francisco Police Activities League
San Francisco Tomorrow
Stanyan Fulton Association
Sierra Club
Sunset Parkside Education and Action
Committee (SPEAK)
Urban Ecology

Park User Groups:

Asian Art Museum of San Francisco
California Academy of Sciences
Dolphin Southend Running Club
Fine Arts Museums of San Francisco
Friends of Recreation and Parks
Golden Gate Park Equestrian Center
Golden Gate Park Skate Patrol
Golden Gate Tennis Club
Impala Racing Team
San Francisco Model Yacht Club
Strybing Arboretum Society
Ultimate Frisbee Organization
Watch Bison Committee

City Agencies and Departments:

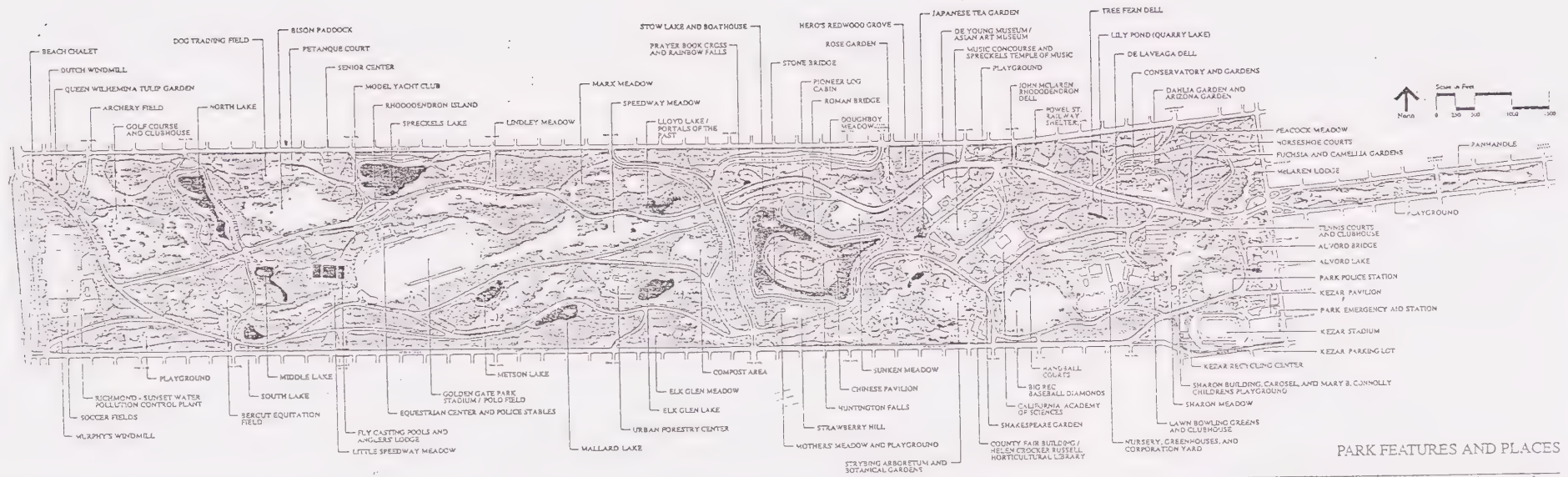
San Francisco Bicycle Advisory Committee
San Francisco Recreation and Park
Department
San Francisco Department of City Planning
San Francisco Department of Parking and
Traffic
San Francisco Department of Public Works
San Francisco Municipal Railway
San Francisco Parking Authority
San Francisco Police Department

Other Government Agencies:

University of California, San Francisco
U.S.D.A. Forest Service
National Park Service

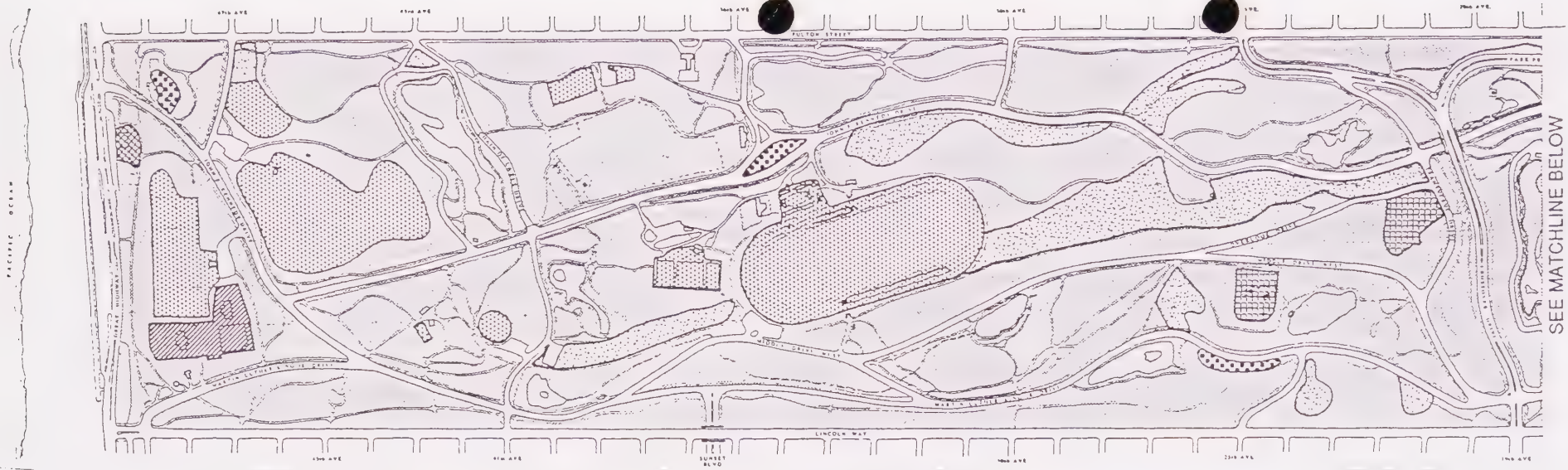
Miscellaneous:

Central Park Conservancy
Golden Gate National Park Association
San Francisco Foundation

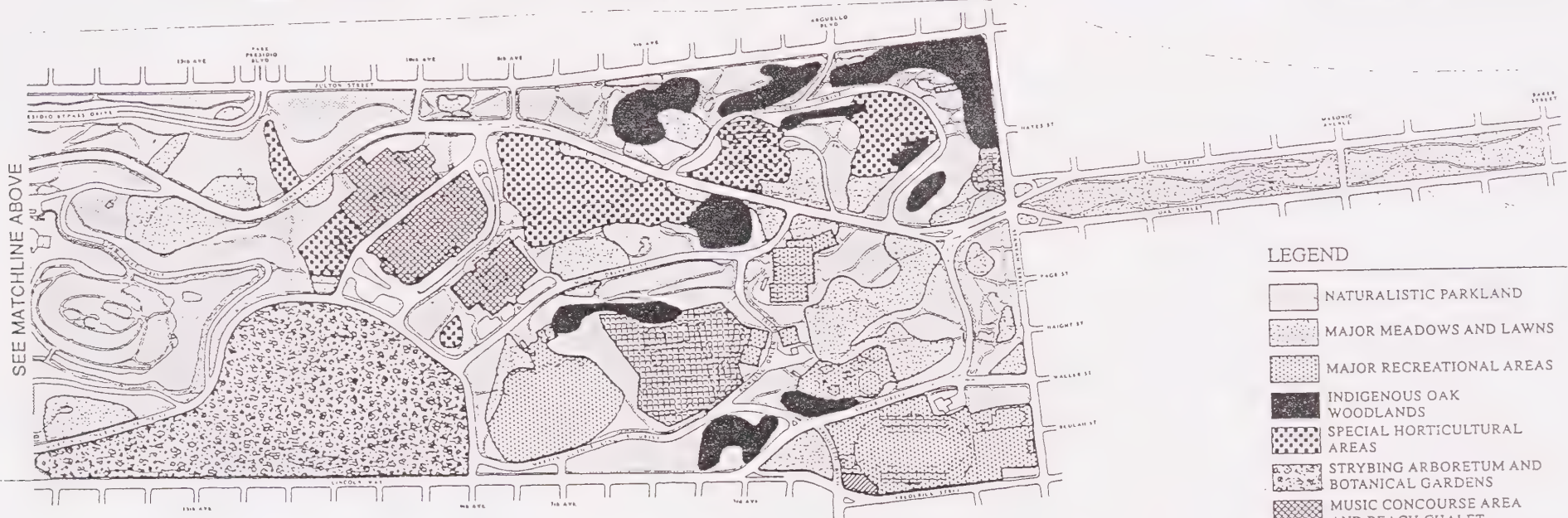


PARK FEATURES AND PLACES

Golden Gate Park Master Plan
5-93













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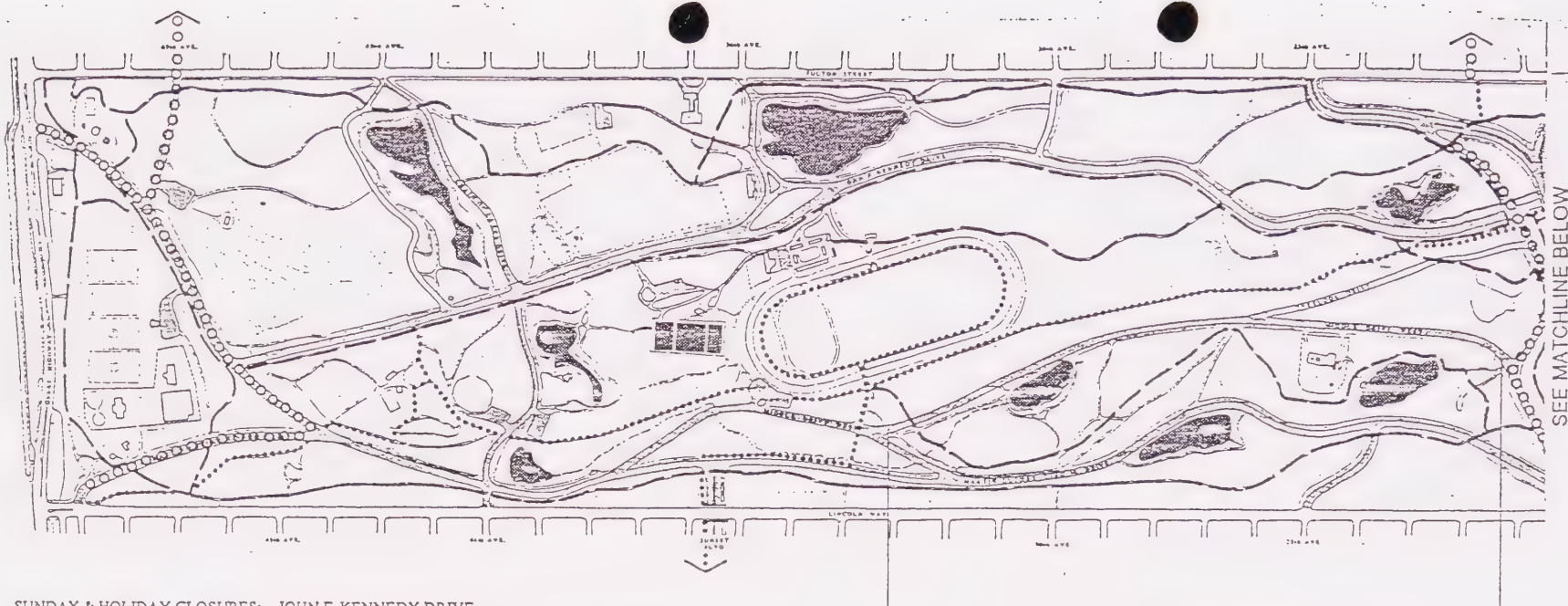
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LEGEND

-  NATURALISTIC PARKLAND
-  MAJOR MEADOWS AND LAWNs
-  MAJOR RECREATIONAL AREAS
-  INDIGENOUS OAK WOODLANDS
-  SPECIAL HORTICULTURAL AREAS
-  STRYBING ARBORETUM AND BOTANICAL GARDENS
-  MUSIC CONCOURSE AREA AND BEACH CHALET
-  MAINTENANCE / OPERATIONS AREAS
-  VEHICULAR CIRCULATION AND PARKING
-  NONCONFORMING USES

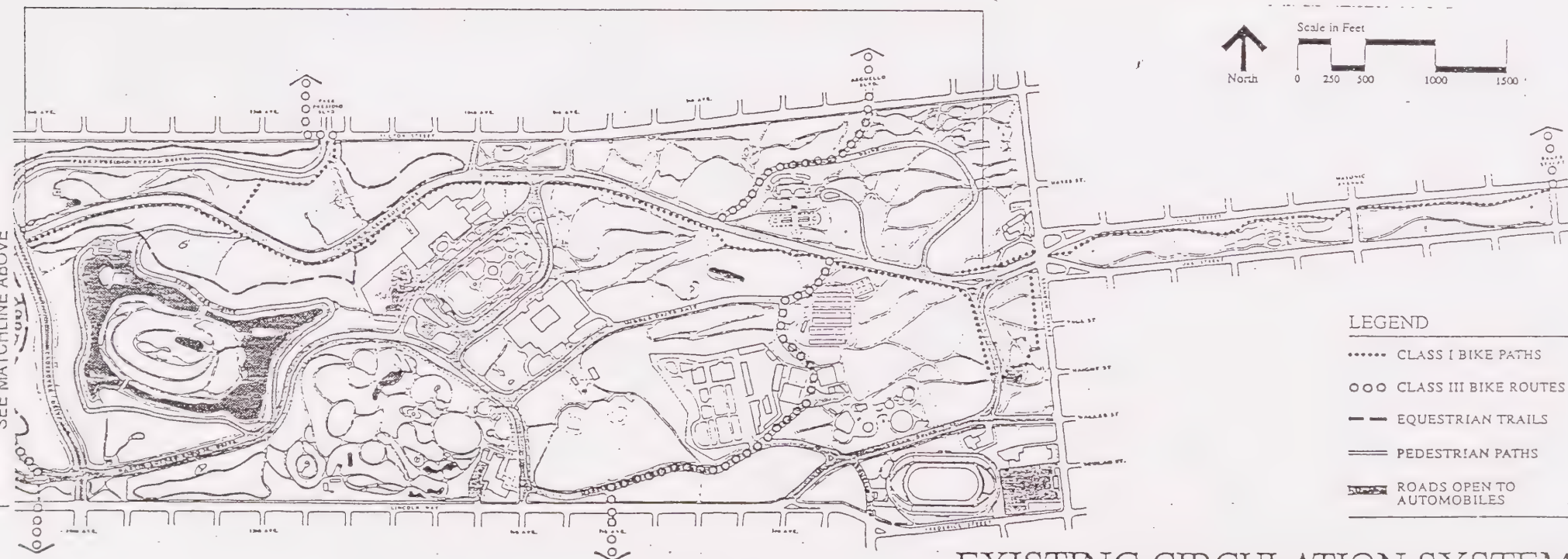


LAND USE ZONES

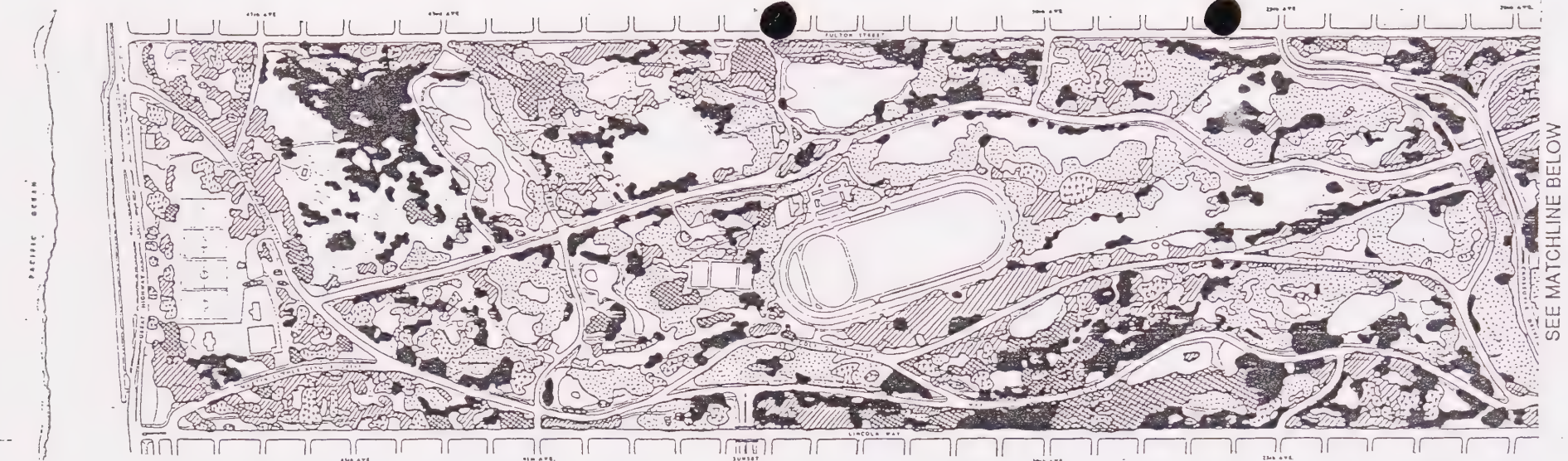









SUNDAY & HOLIDAY CLOSURES: JOHN F. KENNEDY DRIVE
MUSIC CONCOURSE (OPEN HOLIDAYS)
CONSERVATORY DRIVE

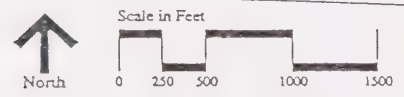
SATURDAY CLOSURES: MIDDLE DRIVE WEST



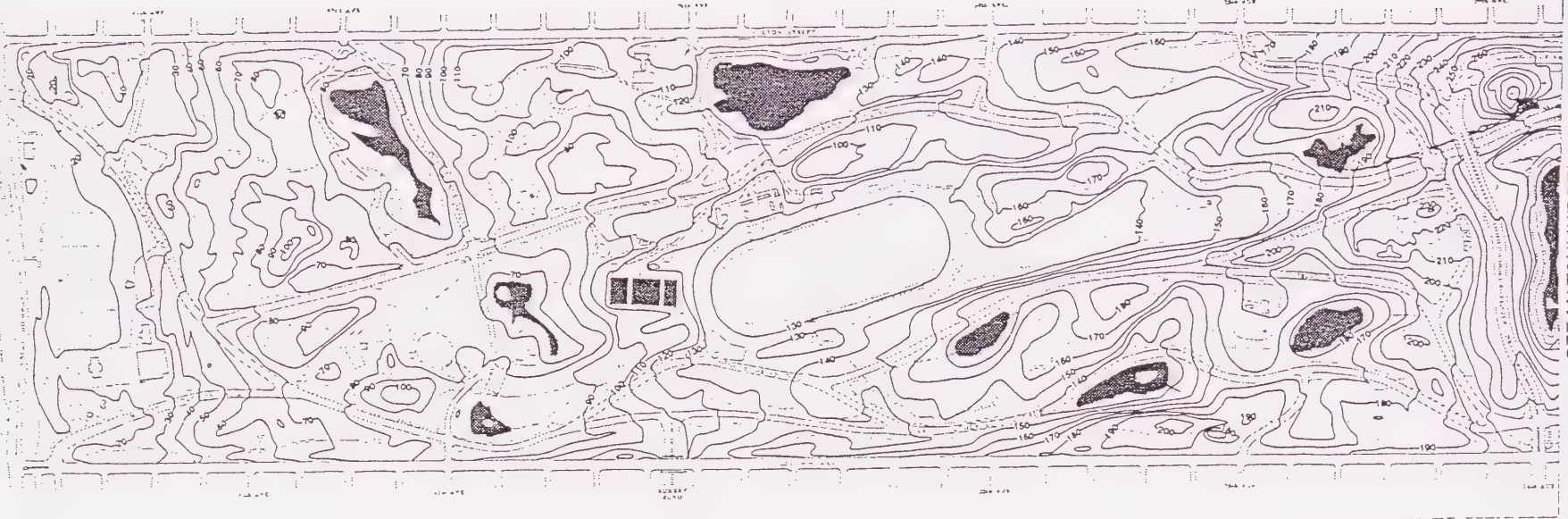
EXISTING CIRCULATION SYSTEM



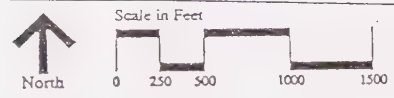
- LEGEND
-  PINE
 -  CYPRESS
 -  EUCALYPTUS
 -  MIXED
(Predominantly Pine/Cypress)
 -  REDWOOD
 -  OAK
 -  REFORESTATION PLOTS



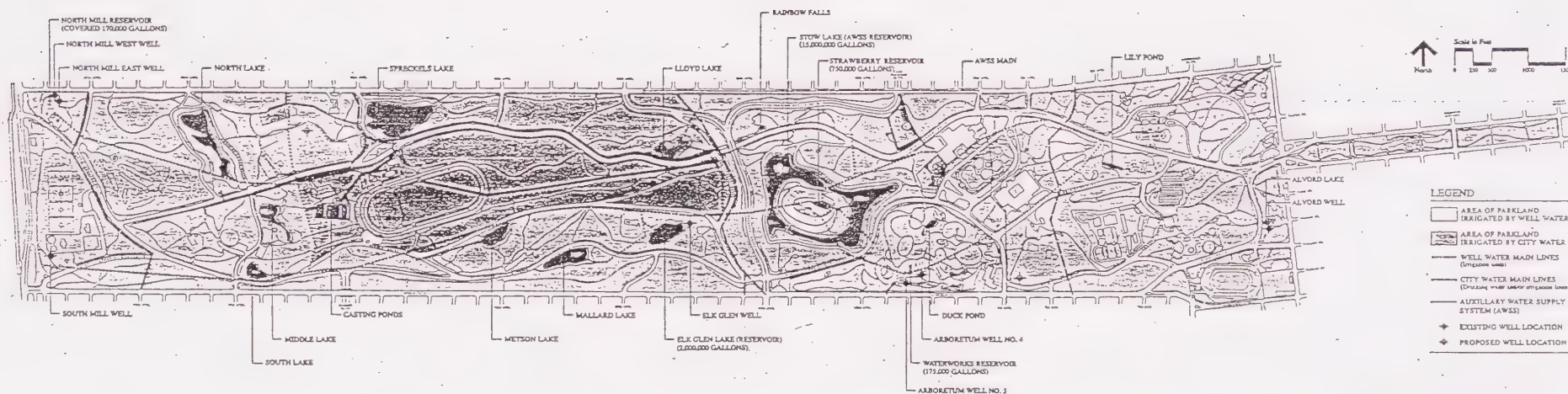
FOREST CANOPY



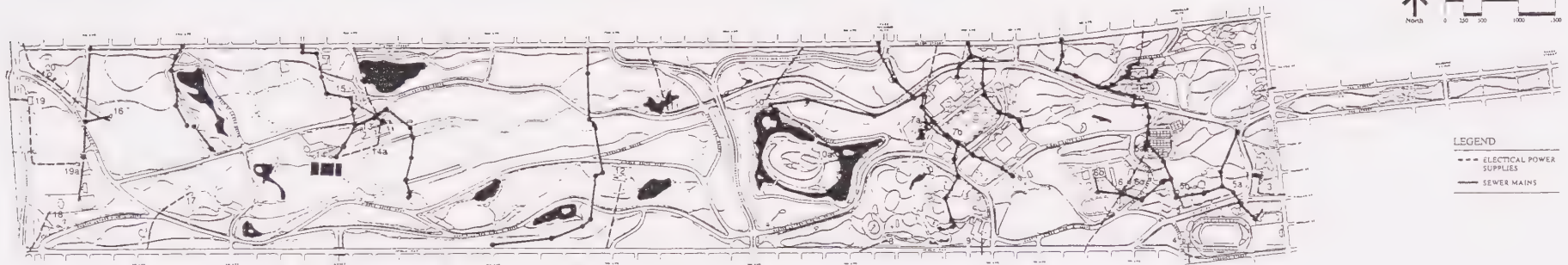
CONTOUR INTERVAL: 10 FEET



TOPOGRAPHY



WATER DISTRIBUTION SYSTEM



LEGEND

--- ELECTRICAL POWER SUPPLIES

--- SEWER MAINS

1 McLaren Lodge
1 @ 400 amp Power lines to the Stadium

2 Compressor (in under main)
1 @ 400 amp Transformer on Avenue

3 Alameda Lake
Feeder from Water

4 Kono Lodge
12 by PG&E Transformer from Potrero
1 @ 1000 amp in station

5 Shores Building (Caret)
Transformer on Canal Dr.
1 @ 400 amp

5A Pumps in hotel

5B Pumps in bridge (New road)

6 Main Yard PG&E Transformer
1 @ 400 amp
1 @ 400 amp
2 @ 600 amp

6A Tennis Courts

6B Horses

6C Impulse at Bowling Green
(Small pump)

7 PG&E Vault (New)

7A Ten Gardens (Power supply)

7B Sand Shed

8 Antiques
PG&E Transformer on building
400 v
2 power pumps for 1 supply wells
2 well pumps

9 Country Fair Building
1 @ 1000 amp

10 PG&E Transformer (400v)
1 @ 200 amp
Impulse & pump

10B Heston Falls
Sub-feed from 10
2 pumps

11 Pump House at Laurel Lake (For Falls)
1 @ 400 amp

12 ED Case
(Pump house for sub-distribution
in water emersion)

13 Police Station
(Main power for police field
compos emersion)

14 Angler's Lodge
1 @ 100amp

15 Model Yacht Building
1 @ 100 amp
(From power station)

16 Carpenter Building
1 @ 100 amp

17 Carpenter's Museum Building (New)
Single phase new 200 amp service from 43

18 Sanatorium Adjacent Building &
1 @ 100 amp

19 Beach Club
(Summer field emersion)

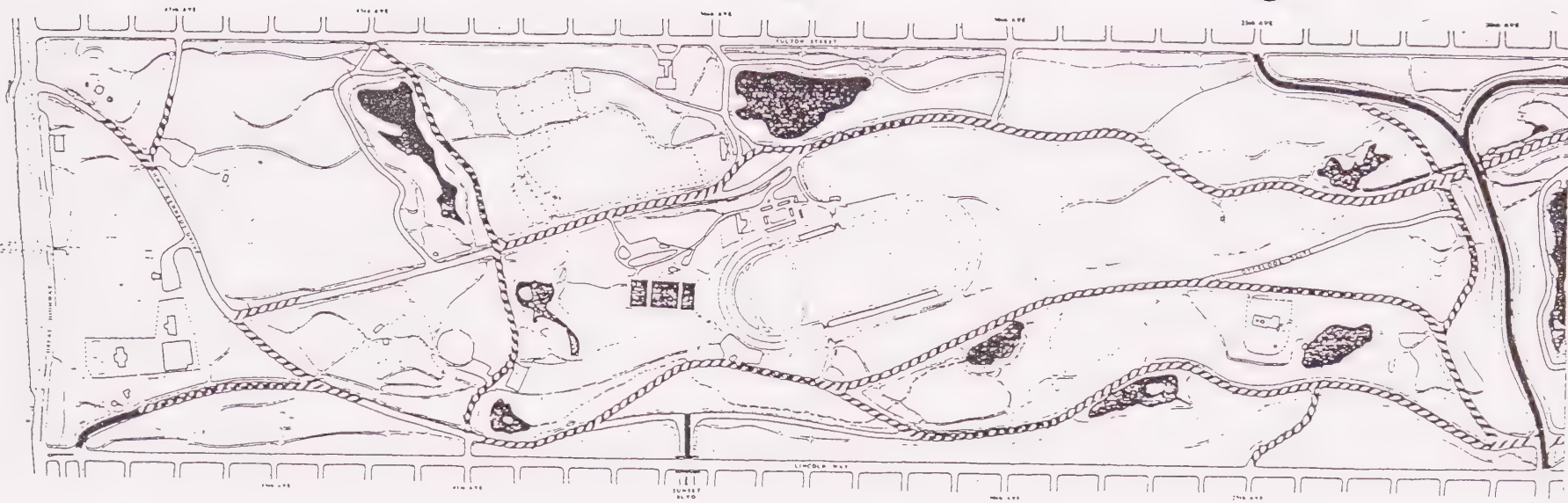
19B Salt Pans

20 Dunes Windmill
(Impulse & well pumps)
400 amp

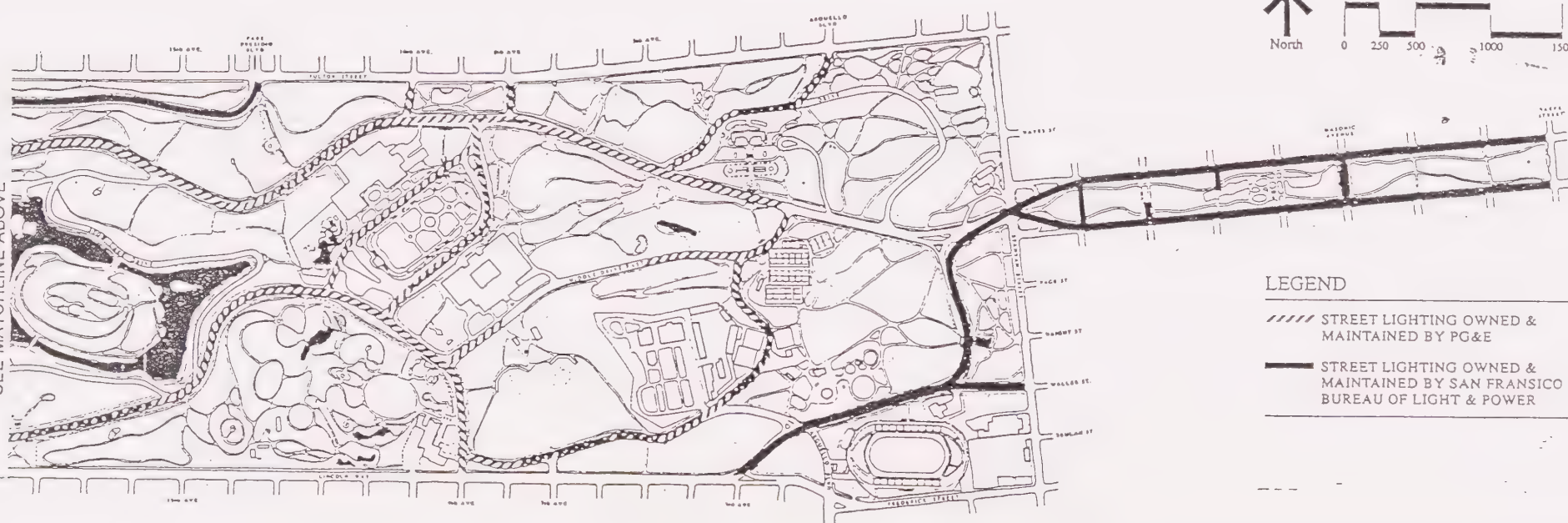
**ELECTRICAL DISTRIBUTION
AND WASTE WATER SYSTEMS**

GOLDEN GATE PARK MASTER PLAN

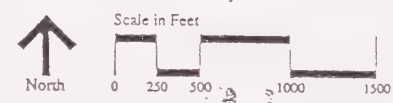
5/92



SEE MATCHLINE BELOW



SEE MATCHLINE ABOVE



- LEGEND**
- //// STREET LIGHTING OWNED & MAINTAINED BY PG&E
 - STREET LIGHTING OWNED & MAINTAINED BY SAN FRANCISCO BUREAU OF LIGHT & POWER

EXISTING STREET LIGHTING

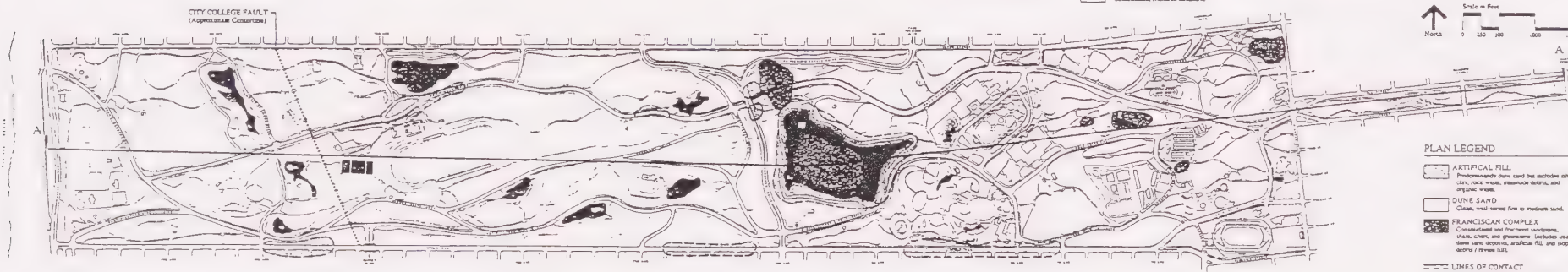


SECTION LEGEND

Qd	DUNE SAND Clay, well-sorted fine to medium sand.	Kcu	FRANCISCAN COMPLEX Consolidated and fractured sandstone, shale, chert, and gneiss (includes clay dune sand deposits, artificial fill, some debris / reverse fill).	CITY COLLEGE FAULT ZONE Shaded north of the Franciscan Complex and Great Valley Sequence.
Qc	CULMA FORMATION Unconsolidated fine to medium sand, well-sorted to medium amount of silt and clay.	Klu	GREAT VALLEY SEQUENCE Consolidated, fractured sandstone.	

SECTION A-A'

SCALE:
HORIZONTAL: 1" = 300'
VERTICAL: 1" = 100'



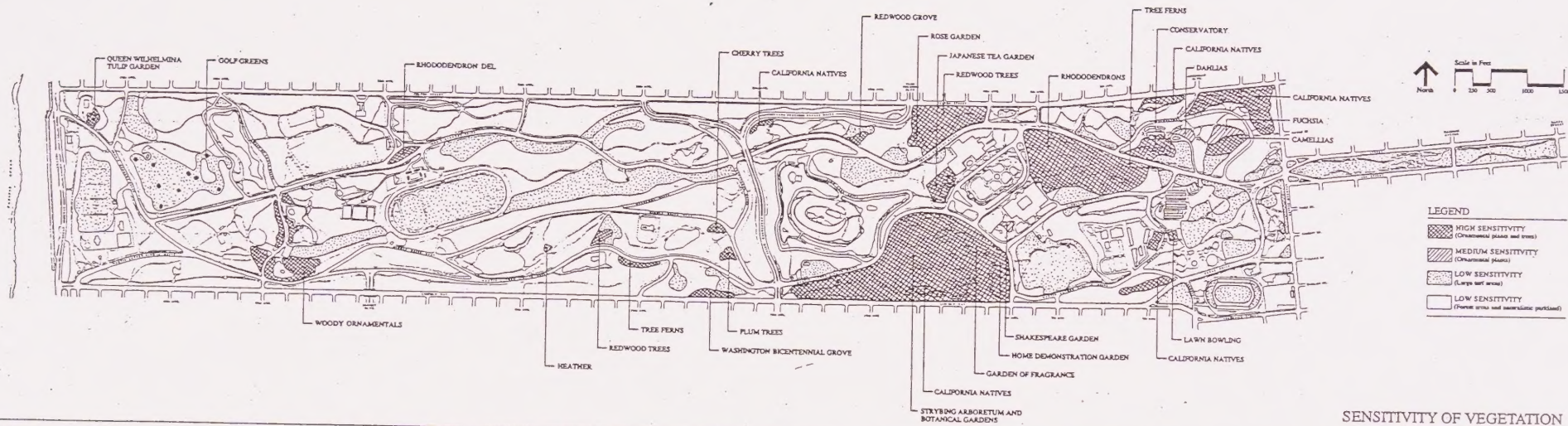
PLAN LEGEND

ARTIFICIAL FILL	Profoundly disturbed zone that includes all, clay, rock, waste, debris, and organic waste.
DUNE SAND	Clay, well-sorted fine to medium sand.
FRANCISCAN COMPLEX	Consolidated and fractured sandstone, shale, chert, and gneiss. Includes clay dune sand deposits, artificial fill, and some debris / reverse fill.
LINE OF CONTACT	Delimited where appropriately located.

GEOLOGY



ALLUVIAL THICKNESS AND WELL LOCATIONS



SENSITIVITY OF VEGETATION
TO RECLAIMED WATER
GOLDEN GATE PARK MASTER PLAN
5/93

